SyncMaster

SERIES 3 | TB300
SERIES 3 | TB350

LED TV MONITOR

(MFM TV)

user manual

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your product at

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SAMSUNG

Figures and illustrations in this User Manual are provided for reference only and may differ from actual product appearance. Product design and specifications may be changed without notice.

Still image warning

Avoid displaying still images (like jpeg picture files) or still image element (like LED display programme logo, panorama or 4:3 image format, stock or news bar at screen bottom etc.) on the screen. Constant displaying of still picture can cause ghosting of screen, which will affect image quality. To reduce risk of this effect, please follow below recommendations:

- Avoid displaying the same LED display channel for long periods.
- Always try do display any image on full screen, use LED display set picture format menu for best possible match.
- Reduce brightness and contrast values to minimum required to achieve desired picture quality, exceeded values may speed up the burnout process.
- Frequently use all LED display features designed to reduce image retention and screen burnout, refer to proper user manual section for details.

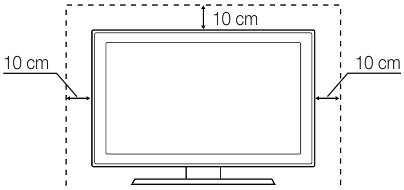
Securing the Installation Space

Keep the required distances between the product and other objects (e.g. walls) to ensure proper ventilation.
Failing to do so may result in fire or a problem with the product due to an increase in the internal temperature of the product.

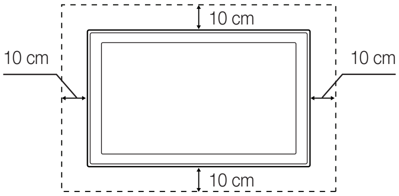
✎ The actual appearance of the LED display may differ from the images in this manual, depending on the model.

✎ Be careful when you touch the LED display. Some parts can be somewhat hot.

Installation with a stand.



Installation with a wall-mount.



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Check the Symbol!

TOOLS

This function can be used by pressing the **TOOLS** button on the remote control.

Note
Indicates additional information.

Getting Started

Safety Precautions

Icons used for safety precautions

⚠	WARNING	Failing to follow the precautions marked with this sign may result in a serious injury or even a fatality.
⚠	CAUTION	Failing to follow the precautions marked with this sign may result in a personal injury or property damage.

⊘ Do not perform.

❗ Must be followed.

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

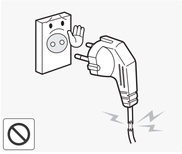
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER ALL SERVICING TO QUALIFIED PERSONNEL.

⚡	This symbol indicates that high voltage is present inside. It is dangerous to make any kind of contact with any internal part of this product.
⚠	This symbol alerts you that important literature concerning operation and maintenance has been included with this product.

Power Related

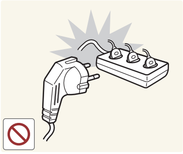
✎ The following images are for your reference and may differ depending on models and countries.

⚠ Warning



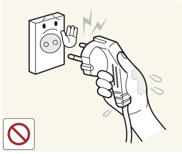
Avoid using a damaged power cord or plug or a loose power outlet.

- Otherwise, it may result in electric shock or fire.



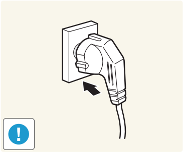
Avoid connecting multiple electric appliances to a single wall outlet.

- Otherwise, it may result in fire due to overheating of the wall outlet.



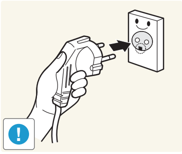
Avoid plugging in or unplugging the power supply with wet hands.

- Otherwise, it may result in electric shock.



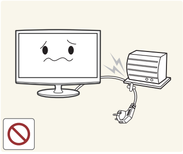
Plug the power plug in firmly.

- Otherwise, it may result in fire.



Make sure to connect the power cord to a grounded wall outlet (for insulation class 1 equipment only).

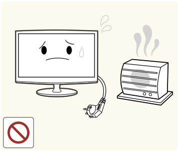
- Otherwise, it may result in electric shock or injury.



Avoid bending or twisting the power cord excessively and avoid placing heavy objects on the cord.

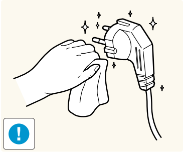
- Otherwise, it may result in electric shock or fire due to a damaged power cord.

Getting Started



Keep the power cord and the product away from a heater.

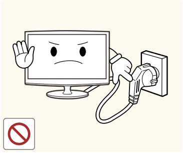
- Otherwise, it may result in electric shock or fire.



If the pins of the power plug or the wall outlet are covered in dust, clean it using a dry cloth.

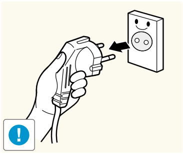
- Otherwise, it may result in fire.

Caution



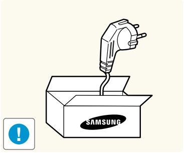
Avoid unplugging the power plug while the product is operating.

- Otherwise, it may damage the product due to electric shock.



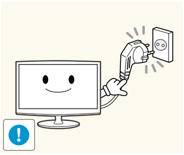
When unplugging the power plug from the wall outlet, make sure to hold it by the plug and not by the cord.

- Otherwise, it may result in electric shock or fire.



Make sure to use only the power cord supplied by our company. In addition, do not use the power cord of another electric appliance.

- Otherwise, it may result in electric shock or fire.

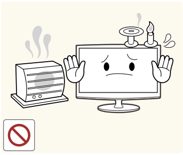


Connect the power plug to a wall outlet that can be easily reached.

- When a problem occurs with the product, you must unplug the power plug to cut the power off completely. You cannot cut the power off completely using only the power button on the product.

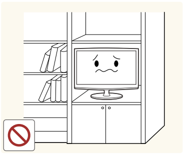
Installation Related

Warning



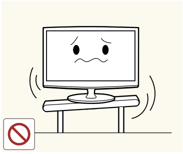
Avoid placing burning candles, mosquitorepellentor cigarettes on the product.

- Otherwise, it may result in fire.



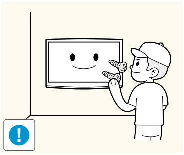
Avoid installing the product in a badly-ventilated location such as inside a bookshelf or closet.

- Otherwise, it may result in fire due to internal over-heating.



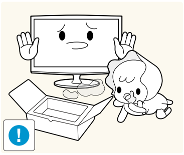
Avoid installing the product in a location that is unstable or exposed to excessive vibration such as on an unstable or slanted shelf.

- The product may fall and this may result in damage to the product or injury.
- If you use the product in a location exposed to excessive vibrations, it may result in a problem with the product or fire.



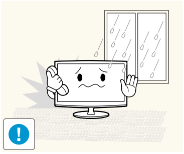
Ask an installation engineer or relevant company to install the product onto the wall.

- Otherwise, it may result in injury.
- Make sure to use the specified wall mount.



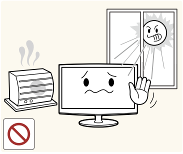
Keep the plastic bags used to pack the product away from children.

- If children place the plastic bags over their heads, they may suffocate.



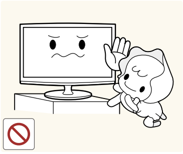
Avoid installing the product in a location exposed to dust, moisture (sauna), oil, smoke or water (rain drops) and installing it within a vehicle.

- This may result in electric shock or fire.



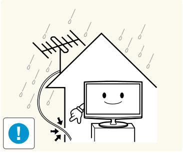
Avoid installing the product in a location exposed to direct sunlight and installing the product near a heat source such as a fireplace or heater.

- This may shorten the product life cycle or cause fire.



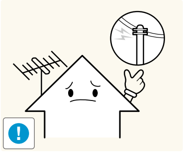
Avoid installing the product where children may reach it.

- If a child touches the product, the product may fall and this may result in injury.
- Since the front part is heavier, install the product on a flat and stable surface.



Bend the outdoor antenna cable downwards at the location where it comes in the house so that rainwater does not flow in.

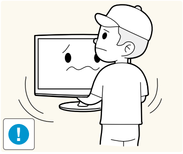
- If rainwater enters the product, it may result in electric shock or fire.



Install the antenna far away from any high voltage cables.

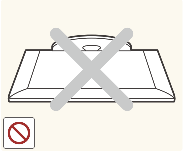
- If the antenna touches or falls onto a high voltage cable, it may result in electric shock or fire.

⚠ Caution



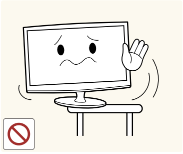
Do not let the product drop while moving it.

- This may result in a problem with the product or injury.



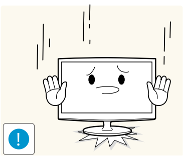
Do not place the product face down on the floor.

- This may damage the panel of the product.



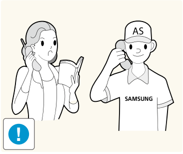
When installing the product on a console or shelf, make sure that the front of the product does not protrude out of the console or shelf.

- Otherwise, this may cause the product to fall off and result in a malfunction or injury.
- Make sure to use a cabinet or shelf suitable to the size of the product.



When putting the product down, handle it gently.

- Otherwise, it may result in a problem with the product or injury.



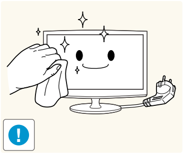
If the product is installed in a location where the operating conditions vary considerably, a serious quality problem may occur due to the surrounding environment. In this case, install the product only after consulting one of our service engineers about the matter.

- Places exposed to microscopic dust, chemicals, too high or low temperature, high humidity, airports or stations where the product is continuously used.

Getting Started

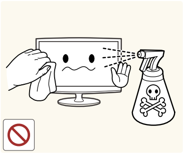
Cleaning Related

⚠ Warning



Before cleaning the product, unplug the power cord.

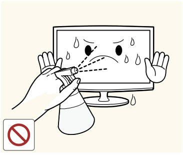
- Otherwise, it may result in electric shock or fire.



When cleaning the product, do not spray water directly over the product parts.

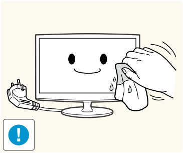
- Make sure that water does not enter the product.
- Otherwise, it may result in fire, electric shock or a problem with the product.

⚠ Caution



Avoid spraying cleansing agent directly onto the product.

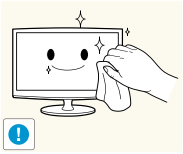
- This may result in discoloration or cracking of the exterior of the product or the panel coming off.



When cleaning the product, disconnect the power cord and clean the product with the supplied cleaning cloth.

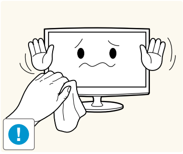
- Avoid using chemicals such as wax, benzene, alcohol, thinner, mosquitorepellent, fragrance, lubrication or cleansing agent when cleaning the product.

  This may result in the exterior being deformed or the print being removed.



If you can't get the product clean with just the supplied cloth, use a soft, damp cloth with a "monitor-exclusive cleansing agent" and wipe the product with it.

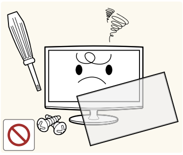
- If no monitor-exclusive cleansing agent is available, dilute a cleansing agent with water at a ratio of 1:10 before cleaning the product.



Since the exterior of the product is easily scratched, be sure to use the supplied cleansing cloth.

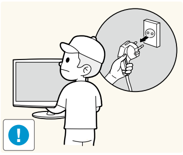
Usage Related

⚠ Warning



Since a high voltage runs through the product, never disassemble, repair or modify the product yourself.

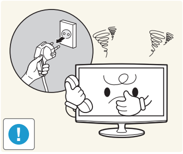
- Otherwise, it may result in fire or electric shock.
- If the product needs to be fixed, contact a service centre.



To move the product, turn the power off and unplug the power cord, the antenna cable and any other wires connected to the product.

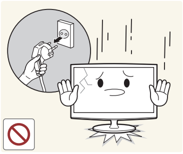
- Otherwise, it may result in electric shock or fire due to the damaged power cord.

Getting Started



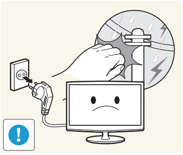
If the product generates a strange noise, a burning smell, or smoke, unplug the power plug immediately and contact a service centre.

- Otherwise, it may result in electric shock or fire.



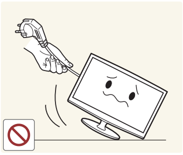
If you drop the product or the case is damaged, turn the power off and unplug the power cord. Contact a service centre.

- Otherwise, it may result in fire or electric shock.



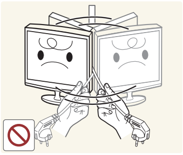
When thunder or lighting occurs, unplug the power cord and under no circumstance touch the antenna cable as this is dangerous.

- Otherwise, it may result in electric shock or fire.



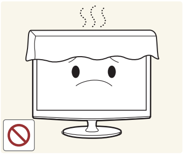
Avoid moving the product by pulling the power cord or antenna cable.

- Otherwise, it may result in electric shock, fire or a problem with the product due to damage to the cable.



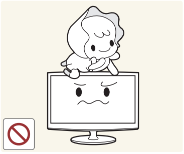
Avoid lifting up or moving the product by holding only the power cord or signal cable.

- Otherwise, it may result in electric shock, fire or a problem with the product due to damage to the cable.



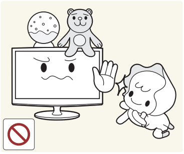
Take care not to block the vent by a table cloth or curtain.

- Otherwise, it may result in fire due to internal overheating.



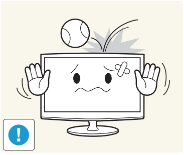
Avoid letting children hang or climb onto the product.

- Otherwise, it may result in the product falling and this may result in injury or death.



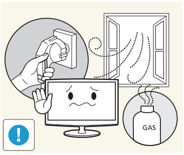
Avoid placing objects such as toys and cookies on top of the product.

- If a child hangs over the product to grab an object, the object or the product may fall and this may result in injury or even death.



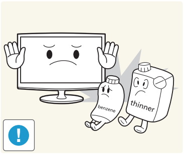
Avoid dropping an object over the product or cause impact to the product.

- Otherwise, it may result in electric shock or fire.



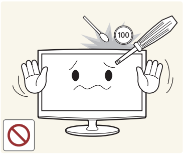
When a gas leak occurs, do not touch the product or the power plug and ventilate immediately.

- A spark may result in an explosion or fire.
- During a thunder or lighting storm, do not touch the power cord or antenna cable.



Avoid using or placing inflammable spray or objects near the product.

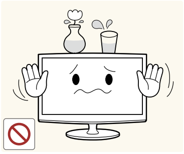
- This may result in an explosion or fire.



Avoid inserting metal objects such as a chopsticks, coins or hairpins, or inflammable objects into the product (the vents, ports, etc).

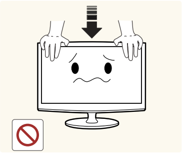
- If water or substances enters the product, turn the power off, unplug the power cord and contact a service centre.
- Otherwise, it may result in a problem with the product, electric shock or fire.

Getting Started



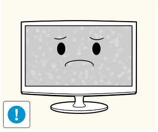
Avoid placing a liquid container such as a vase, flowerpot, beverage, cosmetics or drugs, or a metal object over the product.

- If water or substances enter the product, turn the power off, unplug the power cord and contact a service centre.
- Otherwise, it may result in a problem with the product, electric shock or fire.



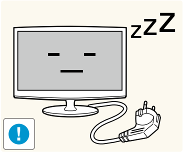
Do not press down hard on the product. The product may become deformed or damaged.

⚠ Caution



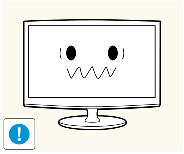
Displaying a still image for a long time may create a persistent image or stain on the screen.

- If you do not use the product for a long time, use the power-saving mode or set the screensaver to the moving picture mode.



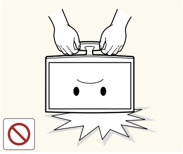
When not using the product for a long time such as leaving your home, unplug the power cord from the wall outlet.

- Otherwise, it may cause dust accumulation and result in fire caused by overheating or short circuit or result in an electric shock.



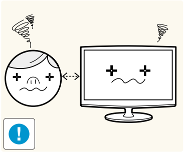
Set the appropriate resolution and frequency for the product.

- Otherwise, it may result in eye strain.

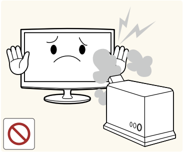


Avoid turning the product upside down or move the product holding only the stand.

- This may cause the product to fall, resulting in damage to the product or injury.

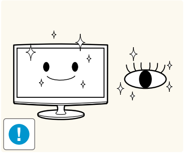


Watching the product from too close a distance continuously may damage your eyesight.



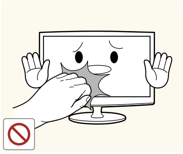
Avoid using a humidifier or cooker near the product.

- Otherwise, it may result in electric shock or fire.

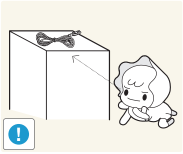


It is important to give your eyes some rest (5 minutes every hour) when viewing the product screen for long periods of time.

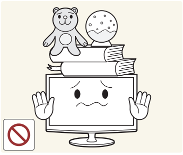
- This will alleviate any eye strain.



Since the display panel is hot after using it for a long time, do not touch the product.

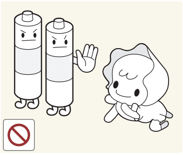


Keep the small accessories in a location out of the reach of children.



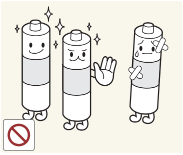
Avoid placing a heavy object over the product.

- Otherwise, it may result in a problem with the product or injury.



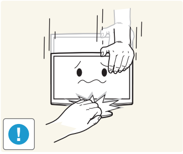
Be careful that children do not place the batteries in their mouths when removed from the remote control. Place the battery in a location that children or infants cannot reach.

- If children have had the battery in their mouths, consult your doctor immediately.



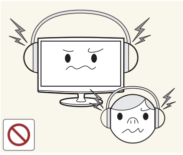
Use only specified standard batteries. Do not use new and used batteries together.

- This may cause a battery to break or leak and may cause fire, injury, or contamination (damage).



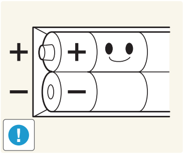
Take care when adjusting the angle of the product or the height of the stand.

- If your hand or finger is caught, you may be injured.
- If the product is tilted excessively, the product may fall and this may result in injury.



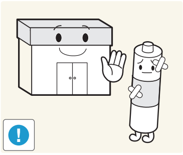
When using headphones or earphones, do not turn the volume too high.

- Having the sound too loud may damage your hearing.



When replacing the batteries, insert them with right polarity (+, -).

- Otherwise, the battery may become damaged or it may cause fire, personal injury or damage due to leakage of the internal liquid.



The batteries (and rechargeable batteries) are not ordinary refuse and must be returned for recycling purposes. The customer is responsible for returning the used or rechargeable batteries for recycling.

- The customer can return used or rechargeable batteries to a nearby public recycling centre or to a store selling the same type of the battery or rechargeable battery.

Getting Started

Accessories

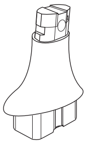
✎ Please make sure the following items are included with your LED display. If any items are missing, contact your dealer.

✎ The items' colours and shapes may vary depending on the models.

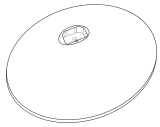
✎ Cables not included in the package contents can be purchased separately.

✎ Check that there is no accessory hidden behind packing materials when you open the box.

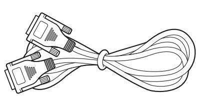
- User Manual
- Remote Control & Batteries (AAA x 2)
- Warranty Card / Safety Guide (Not available in some locations)
- Quick Setup Guide
- Cleaning Cloth
- Power Cord



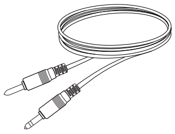
- Stand Connector



- Stand Base

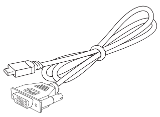


- D-Sub Cable

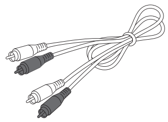


- Stereo Cable

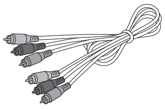
Input Cables (Sold Separately)



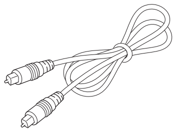
- HDMI to DVI Cable



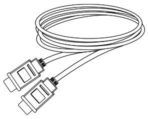
- Audio Cable



- Component Cable



- Optical Cable

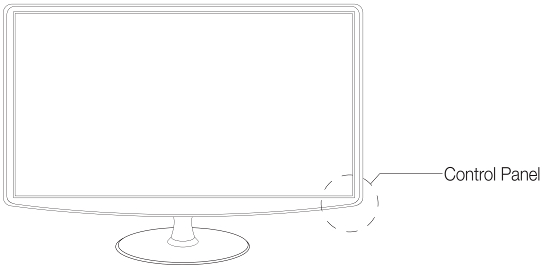


- HDMI Cable

Getting Started

Viewing the Control Panel

✎ The product colour and shape may vary depending on the model.



SOURCE ⏎	Toggles between all the available input sources. In the on-screen menu, use this button as you would use the **ENTER** ⏎ button on the remote control.
MENU	Displays an on-screen menu, the OSD (on screen display) of your LED display's features.
− ◢ +	Adjusts the volume. In the OSD, use the **− ◢ +** buttons as you would use the ◀ and ▶ buttons on the remote control.
∨ CH ∧	Changes the channels. In the OSD, use the **∨ CH ∧** buttons as you would use the ▼ and ▲ buttons on the remote control.
⏻ (Power)	Turns the LED display on or off.
Power Indicator	Blinks and turns off when the power is on and lights up in standby mode.
Remote control sensor	Aim the remote control towards this spot on the LED display.

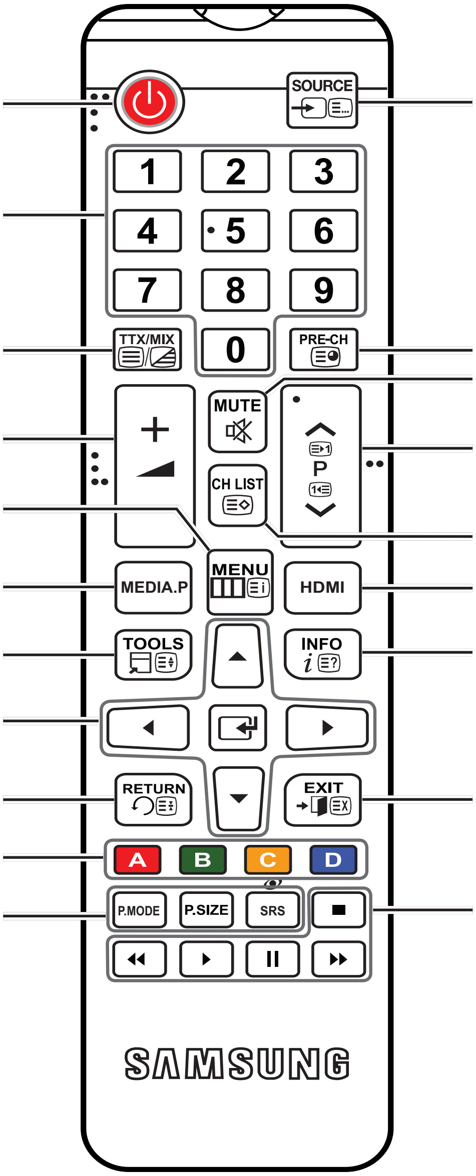
Standby mode

Do not leave your LED display in standby mode for long periods of time (when you are away on a holiday, for example). A small amount of electric power is still consumed even when the power button is turned off. It is best to unplug the power cord.

Getting Started

Viewing the Remote Control

✎ This is a special remote control for the visually impaired and has Braille points on the Channel and Number buttons.


SOURCE
1
2
3
4
5
6
7
8
9
TTX/MIX
0
PRE-CH
MUTE
CH LIST
P
MENU
MEDIA.P
HDMI
TOOLS
INFO
RETURN
EXIT
A
B
C
D
P.MODE
P.SIZE
SRS
SAMSUNG

Turns the TV on and off.

Have direct access to channels.

Alternately select Teletext ON, Double, Mix or OFF.
(Some channels don't support .)

Adjusts the volume.

Displays the main on-screen menu.

Displays the **Media Play** under **Contents Home**.

Quickly select frequently used functions.

Move the cursor and select an item.
Confirm the setting.

Returns to the previous menu.

Use these buttons according to the direction on screen.

P.MODE: Press to select the **Picture Mode**.
P.SIZE: Selects the **Picture Size**.
SRS: Selects **SRS TruSurround** mode.

Displays and selects the available video sources.

Returns to the previous channel.

Cuts off the sound temporarily.

Changes channels.

Displays channel lists on the screen.

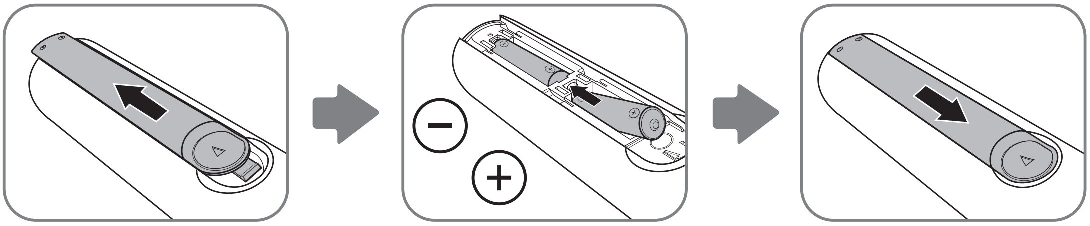
Selects the **HDMI** mode directly.

Displays information on the TV screen.

Exits the menu.

Using these buttons in **Media Play** mode.

Installing batteries (Battery size: AAA)



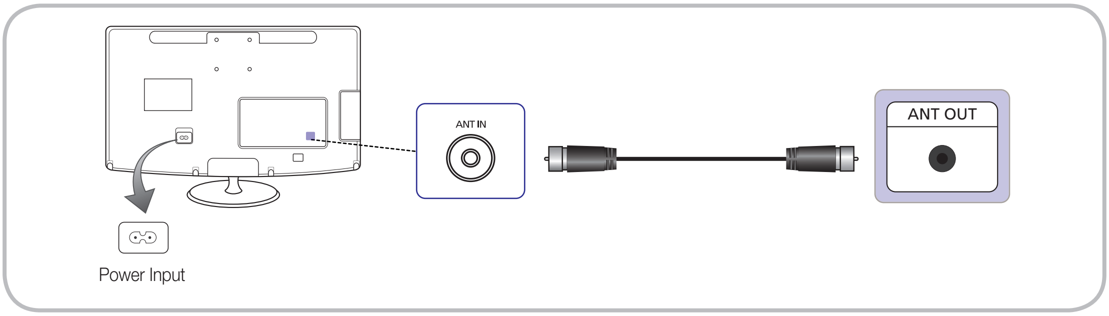
Connections

Connecting to an Antenna

When the LED display is initially powered on, basic settings proceed automatically.

✎ The product colour and shape may vary depending on the model.

✎ Preset: Connecting the mains and antenna.



Setup (Initial Setup)

When the LED display is initially powered on, a sequence of on-screen prompts will assist in configuring basic settings. Press the POWER ⏻ button. **Setup** is available only when the Input **Source** is set to **TV**.

✎ Before turning on the LED display, make sure the antenna cable is connected.

1	Selecting a menu language	Press the ▲ or ▼ button to select a menu language. Press ENTER ↵ button twice when done.
2	Selecting **Store Demo** or **Home Use**	Press the ▲ or ▼ button, then press the ENTER ↵ button. • Select the **Home Use** mode. **Store Demo** Mode is for retail environments. • To return the unit's settings from **Store Demo** to **Home Use** (standard): Press the volume button on the LED display. When you see the volume OSD, press and hold MENU for 5 sec. • **Store Demo** is only for shop display. If you select it, several functions are not able to use. Please select **Home Use** when you watch at home.
3	Selecting an area	Press the ENTER ↵ button. Select the appropriate area by pressing the ▲ or ▼ button. Press the ENTER ↵ button to confirm your choice.
4	**Auto Tuning**	Press the ▲ or ▼ button to select correct option, and then press ENTER ↵ button twice. • **I use an aerial cable.** Memorize all of the available channels using RF cable (**Auto Tuning** necessary). • **I use a cable or satellite service.** You don't need to use **Auto Tuning** to find channels. ✎ You can complete **Auto Tuning** by selecting it.
5	Setting the **Clock Mode**	Set the ENTER ↵ button. Select the Day, Month, Year, Hour, or Minute by pressing the ◀ or ▶ button. Set the Day, Month, Year, Hour, or Minute by pressing the ▲ or ▼ button. You can also set the Day, Month, Year, Hour and Minute by pressing the number buttons on the remote control.
6	Complete	Press the ENTER ↵ button.

If You Want to Reset This Feature...

Select **System - Setup** (Initial Setup). Enter your 4 digit PIN number. The default PIN number is "0-0-0-0". If you want to change the PIN number, use the **Change PIN** function.
You should do **Setup** (MENU → **System**) again at home although you did in shop.

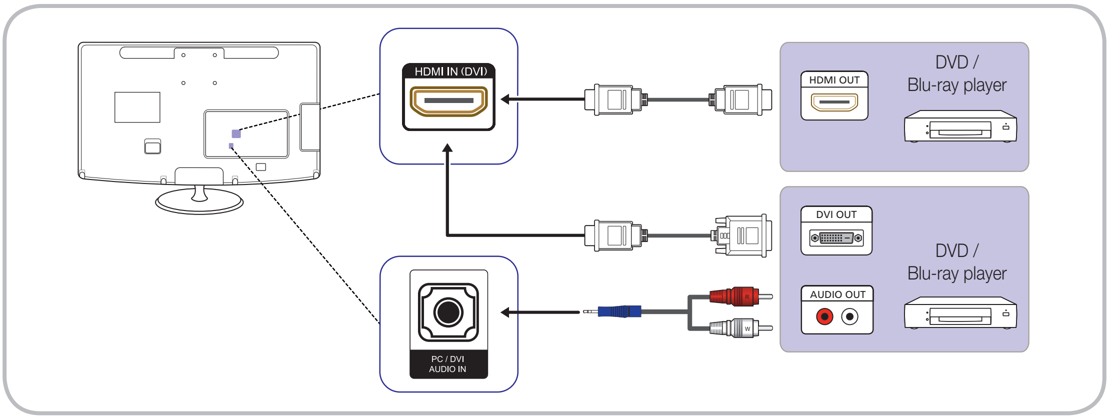
✎ If you forget the PIN code, press the remote control buttons in the following sequence in Standby mode, which resets the PIN to "0-0-0-0": POWER (off) → MUTE → 8 → 2 → 4 → POWER (on).

Connections

Connecting to an AV Device

Using an HDMI or an HDMI to DVI cable (up to 1080p)

Available devices: DVD, Blu-ray player, HD cable box, HD STB (Set-Top-Box) satellite receiver, VCR

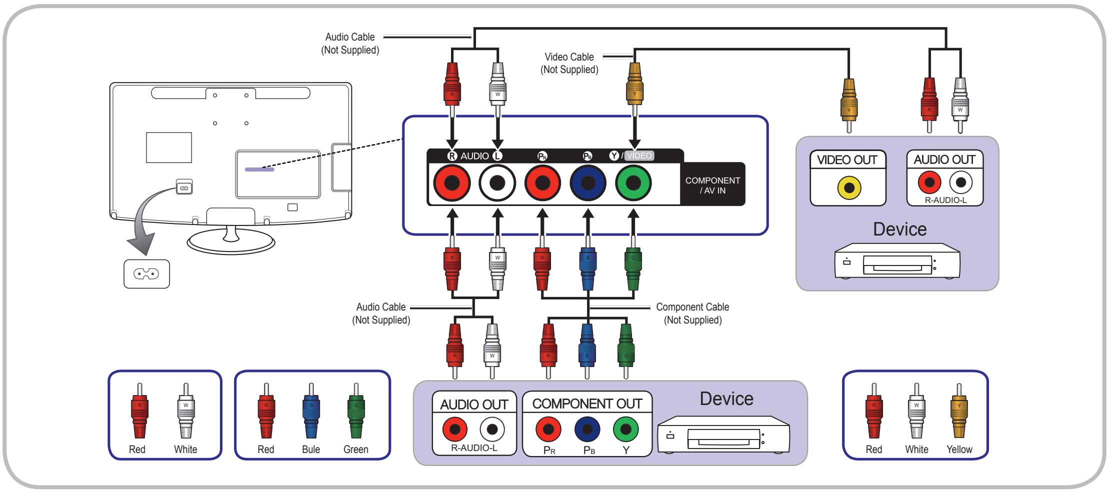

HDMI IN (DVI)
PC / DVI
AUDIO IN
HDMI OUT
DVD /
Blu-ray player
DVI OUT
AUDIO OUT
DVD /
Blu-ray player

✎ **HDMI IN(DVI) / PC/DVI AUDIO IN**

- For better picture and audio quality, connect to a digital device using an HDMI cable.
- An HDMI cable supports digital video and audio signals, and does not require an audio cable.
  - To connect the TV to a digital device that does not support HDMI output, use an HDMI/DVI and audio cables.
- The picture may not display normally (if at all) or the audio may not work if an external device that uses an older version of HDMI mode is connected to the LED display. If such a problem occurs, ask the manufacturer of the external device about the HDMI version and, if out of date, request an upgrade.
- Be sure to purchase a certified HDMI cable. Otherwise, the picture may not display or a connection error may occur.
- A basic high-speed HDMI cable or one with ethernet is recommended. This product does not support the ethernet function via HDMI.

Using a Component (up to 1080p) or Audio/Video (480i only) Cable

Available devices: DVD, Blu-ray player, cable box, STB satellite receiver, VCR


Audio Cable
(Not Supplied)
Video Cable
(Not Supplied)
R AUDIO L
PR
PB
Y / VIDEO
COMPONENT
/ AV IN
VIDEO OUT
AUDIO OUT
R-AUDIO-L
Device
Audio Cable
(Not Supplied)
Component Cable
(Not Supplied)
Red
White
Red
Bule
Green
AUDIO OUT
R-AUDIO-L
COMPONENT OUT
PR
PB
Y
Device
Red
White
Yellow

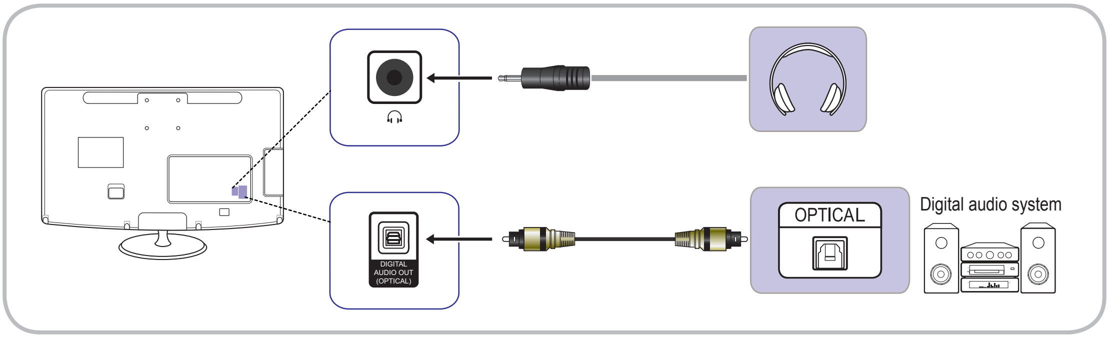
✎ When connecting to **AV IN**, the color of the **AV IN [Y/VIDEO]** jack (green) will not match the video cable (yellow).

✎ For better picture quality, the Component connection is recommended over the A/V connection.

Connections

Connecting to a Audio device and PC

Using an Optical (Digital) or a Headphone Connection


DIGITAL
AUDIO OUT
(OPTICAL)
OPTICAL
Digital audio system

TB300 series have not headphone and Optical interface.

✎ **DIGITAL AUDIO OUT (OPTICAL)**

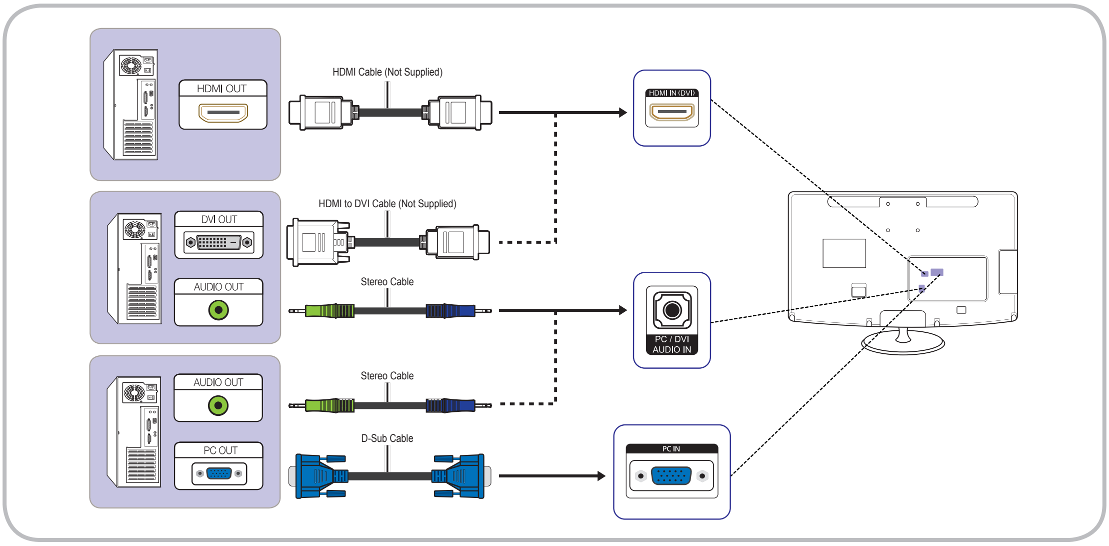
- When a Digital Audio System is connected to the **DIGITAL AUDIO OUT (OPTICAL)** jack, decrease the volume of both the LED display and the system.
- 5.1 CH (channel) audio is available when the LED display is connected to an external device supporting 5.1 CH.
- When the receiver (home theatre) is set to on, you can hear sound output from the TV's optical jack. When the TV is receiving a DTV signal, the TV will send 5.1 CH sound to the home theatre receiver. When the source is a digital component such as a DVD / Blu-ray player / cable box / STB (Set-Top-Box) satellite receiver and is connected to the TV via HDMI, only 2 CH audio will be heard from the home theatre receiver. If you want to hear 5.1 CH audio, connect the digital audio out jack from your DVD / Blu-ray player / cable box / STB satellite receiver directly to an amplifier or home theatre.

✎ **Headphones** 🎧: You can connect your headphones to the headphones output on your set. While the headphones are connected, the sound from the built-in speakers will be disabled.

- Sound function may be restricted when connecting headphones to the LED display.
- Headphone volume and LED display volume are adjusted separately.

Using an HDMI cable or an HDMI to DVI cable or a D-sub cable

✎ Connecting through the HDMI cable may not be supported depending on the PC.


HDMI OUT
HDMI Cable (Not Supplied)
HDMI IN (DVI)
DVI OUT
HDMI to DVI Cable (Not Supplied)
AUDIO OUT
Stereo Cable
PC / DVI AUDIO IN
AUDIO OUT
Stereo Cable
PC OUT
D-Sub Cable
PC IN

Connections

Display Modes (D-Sub and HDMI/DVI Input)

Optimal resolution : 1366 x 768 pixels @60Hz (T19B300 model only)

Display Mode			Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
Mode	Resolution					
IBM	720 x 400	70Hz	31.469	70.087	28.322	-/+
VESA DMT	640 x 480	60Hz	31.469	59.940	25.175	-/-
MAC	640 x 480	67Hz	35.000	66.667	30.240	-/-
VESA DMT	640 x 480	72Hz	37.861	72.809	31.500	-/-
VESA DMT	640 x 480	75Hz	37.500	75.000	31.500	-/-
VESA DMT	800 x 600	60Hz	37.879	60.317	40.000	+/+
VESA DMT	800 x 600	72Hz	48.077	72.188	50.000	+/+
VESA DMT	800 x 600	75Hz	46.875	75.000	49.500	+/+
MAC	832 x 624	75Hz	49.726	74.551	57.284	-/-
VESA DMT	1024 x 768	60Hz	48.363	60.004	65.000	-/-
VESA DMT	1024 x 768	70Hz	56.476	70.069	75.000	-/-
VESA DMT	1024 x 768	75Hz	60.023	75.029	78.750	+/+
VESA DMT	1280 x 720	60Hz	45.000	60.000	74.250	+/+
VESA DMT	1366 x 768	60Hz	47.712	59.790	85.500	+/+

Optimal resolution : 1920 x 1080 pixels @60Hz

Display Mode			Horizontal Frequency (kHz)	Vertical Frequency(Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
Mode	Resolution					
IBM	720 x 400	70Hz	31.469	70.087	28.322	-/+
VESA DMT	640 x 480	60Hz	31.469	59.940	25.175	-/-
MAC	640 x 480	67Hz	35.000	66.667	30.240	-/-
VESA DMT	640 x 480	72Hz	37.861	72.809	31.500	-/-
VESA DMT	640 x 480	75Hz	37.500	75.000	31.500	-/-
VESA DMT	800 x 600	60Hz	37.879	60.317	40.000	+/+
VESA DMT	800 x 600	72Hz	48.077	72.188	50.000	+/+
VESA DMT	800 x 600	75Hz	46.875	75.000	49.500	+/+
MAC	832 x 624	75Hz	49.726	74.551	57.284	-/-
VESA DMT	1024 x 768	60Hz	48.363	60.004	65.000	-/-
VESA DMT	1024 x 768	70Hz	56.476	70.069	75.000	-/-
VESA DMT	1024 x 768	75Hz	60.023	75.029	78.750	+/+
VESA DMT	1152 x 864	75Hz	67.500	75.000	108.000	+/+
MAC	1152 x 870	75Hz	68.681	75.062	100.000	-/-
VESA DMT	1280 x 720	60Hz	45.000	60.000	74.250	+/+
VESA DMT	1280 x 800	60Hz	49.702	59.810	83.500	-/+
VESA DMT	1280 x 1024	60Hz	63.981	60.020	108.000	+/+
VESA DMT	1280 x 1024	75Hz	79.976	75.025	135.000	+/+
VESA DMT	1366 x 768	60Hz	47.712	59.790	85.500	+/+
VESA DMT	1440 x 900	60Hz	55.935	59.887	106.500	-/+
VESA DMT	1600 x 900RB	60Hz	60.000	60.000	108.000	+/+
VESA DMT	1680 x 1050	60Hz	65.290	59.954	146.250	-/+
VESA DMT	1920 x 1080	60Hz	67.500	60.000	148.500	+/+

✎ **NOTE**

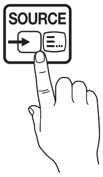
- The interlace mode is not supported.
- The set might operate abnormally if a non-standard video format is selected.
- Separate and Composite modes are supported. SOG(Sync On Green) is not supported.

Connections

Changing the Input Source

Source

SOURCE → **Source**



Use to select LED display or an external input sources such as a DVD / Blu-ray player / cable box /STB satellite receiver.

- **TV / PC / HDMI/DVI / AV / Component / USB**

✎ In the **Source**, connected inputs will be highlighted.

✎ **TV** and **PC** always stay activated.

Edit Name

SOURCE → TOOLS → **Edit Name** → ENTER

In the **Source**, press the TOOLS button, and then you can set an external input sources name you want.

- **VCR / DVD / Cable STB / Satellite STB / PVR STB / AV Receiver / Game / Camcorder / PC / DVI PC / DVI Devices / TV / IPTV / Blu-ray / HD DVD / DMA**: Name the device connected to the input jacks to make your input source selection easier.

✎ When connecting a PC to the **HDMI IN (DVI)** port with HDMI cable, you should set the LED display to **PC** mode under **Edit Name**.

✎ When connecting a PC to the **HDMI IN (DVI)** port with HDMI to DVI cable, you should set the LED display to **DVI PC** mode under **Edit Name**.

✎ When connecting an AV devices to the **HDMI IN (DVI)** port with HDMI to DVI cable, you should set the LED display to **DVI Devices** mode under **Edit Name**.

Information

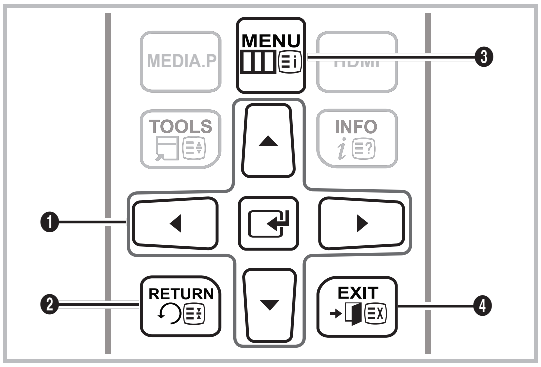
SOURCE → TOOLS → **Information** → ENTER

You can see detailed information about the selected external device.

Basic Features

How to Navigate Menus

Before using the LED display, follow the steps below to learn how to navigate the menu and select and adjust different functions.



❶ **ENTER** / Direction button: Move the cursor and select an item. Confirm the setting.

❷ **RETURN** button: Returns to the previous menu.

❸ **MENU** button: Displays the main on-screen menu.

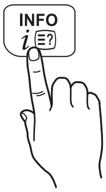
❹ **EXIT** button: Exits the on-screen menu.

How to Operate the OSD (On Screen Display)

The access step may differ depending on the selected menu.

1	MENU	The main menu options appear on the screen: **Picture**, **Sound**, **Channel**, **System**, **Support**.
2	▲ / ▼	Select an icon with the ▲ or ▼ button.
3	ENTER	Press ENTER to access the sub-menu.
4	▲ / ▼	Select the desired submenu with the ▲ or ▼ button.
5	◀ / ▶	Adjust the value of an item with the ◀ or ▶ button. The adjustment in the OSD may differ depending on the selected menu.
6	ENTER	Press ENTER to complete the configuration.
7	EXIT	Press EXIT.

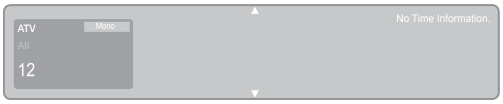
Using the INFO button (Now & Next guide)



The display identifies the current channel and the status of certain audio-video settings.

The Now & Next guide shows daily LED display programme information for each channel according to the broadcasting time.

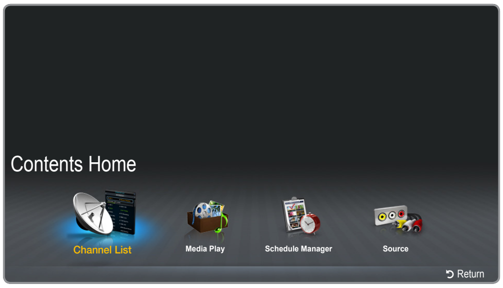
- Scroll ▲ / ▼ to view information for other channels. If you want to move to the currently selected channel, press the ENTER↵ button.



- **The displayed image may differ depending on the model.**

Using the Channel Menu

Press the MEDIA.P button to select **Contents Home**, and then select the menu you want to use. Each screen will be displayed.



- **The displayed image may differ depending on the model.**

Schedule Manager

MEDIA.P → **Contents Home** → **Schedule Manager** → ENTER↵

You can view, modify or delete a channel you have reserved to watch.

Using the Schedule Viewing

You can set a desired channel to be displayed automatically at the intended time. Set the current time first to use this function.

1. Press the ENTER↵ button to select **Schedule Manager**.
2. Press the TOOLS▤ button or A button to add programme to schedule manually. The **Schedule Viewing** screen appears.
3. Press the ▲ / ▼ / ◀ / ▶ buttons to set the **Channel**, **Repeat**, **Date** or **Start Time**.

- **Channel**: Select the desired channel.
- **Repeat**: Select **Once**, **Manual**, **Sat~Sun**, **Mon~Fri** or **Everyday** to set at your convenience. If you select **Manual**, you can set the day you want.

  ✎ The ✓ mark indicates the date is selected.
- **Date**: you can set desired date.

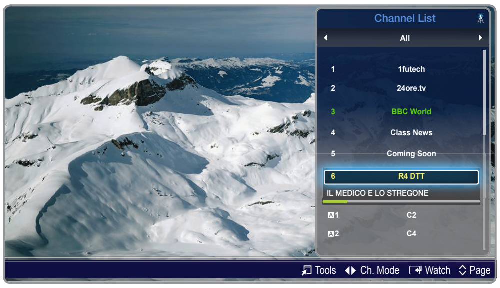
  ✎ It is available when you select **Once** in **Repeat**.
- **Start Time**: You can set start time you want.

  ✎ On the **Information** screen, you can change or cancel a reserved information.
  - **Cancel Schedule**: Cancel a show you have reserved to watch.
  - **Edit Schedule**: Change a show you have reserved to watch.
  - **Return**: Return to the previous screen.

Channel List

MEDIA.P → **Channel List** → ENTER↵

You can view all the channel searched.



- **The displayed image may differ depending on the model.**

✎ When you press the CH LIST button on the remote control, **Channel List** screen will be displayed at once.

Using the operation buttons with the **Channel List**.

■ ▤ **(Tools)**: Press Tools button to check the following functions.

- **Edit Favourites**: Set channels you watch frequently as favourites.
  1. Select the **Edit Favourites**, then press the ENTER↵ button.

     ✎ If the channel is already added to favourite channel, **Edit Favourites** will be shown.
  2. Press the ENTER↵ button to select **Favourites 1 - 5**, then press the **OK** button.

     ✎ One favourite channel can be added in several of **Favourites** among **Favourites 1 - 5**.

- **Lock / Unlock**: Lock a channel so that the channel cannot be selected and viewed.
  - ✎ This function is available only when the Channel Lock is set to On.
  - ✎ The PIN input screen appears. Enter your 4-digit PIN, the default of which is “0-0-0-0”. Change the PIN using the Change PIN option.
- **Edit Channel Name**: Assign your own channel name.
  - ✎ This function may not support depending on the region.
- **Edit Channel Number:** Edit the number by pressing the number buttons desired.
  - ✎ This function may not support depending on the region.
- **Delete**: You can delete a channel to display the channels you want.
- **Information**: Display the channel name, resolution, picture mode, language and so on.(Some just available for DTV)
- **Edit Mode**: You can select desired channels and edit it.

■ **◀ ▶ (Ch. Mode)**: Move to the type of channels you want to display on the **Channel List** screen.

✎ The option may differ depending on country.

■ **⏎ (Watch / Information)**: Watches the channel you select. / Displays details of the selected programme.

■ **◇ (Page)**: Move to next or previous page.

Channel Menu

Retuning Channels

MENU ▥ → **Channel** → ENTER ⏎

Area

You can change the area for channels.

Auto Tuning

Scans for a channel automatically and stores in the TV.

✎ Automatically allocated programme numbers may not correspond to actual or desired programme numbers. If a channel is locked using the **Channel Lock** function, the PIN input window appears.

Manual Tuning

Scans for a channel manually and stores in the LED display.

✎ If a channel is locked using the **Channel Lock** function, the PIN input window appears.

1. Press the ENTER ⏎ button to select **New**.
2. Set the **Programme**, **Colour System**, **Sound System**, **Channel** and **Search**.
3. Press the ▼ button to select **Store**. When scanning has finnished, a channel is updated in the channel list.

Fine Tune

If the reception is clear, you do not have to fine tune the channel, as this is done automatically during the search and store operation. If the signal is weak or distorted, fine tune the channel manually. Scroll to the left or right until the image is clear.

✎ Settings are applied to the channel you’re currently watching.

✎ Fine tuned channels that have been saved are marked with an asterisk “*” on the right-hand side of the channel number in the channel banner

✎ To reset the fine-tuning, select **Reset**.

Picture Menu

Changing the Preset Picture Mode

MENU ▥ → **Picture** → **Picture Mode** → ENTER ↵

Picture Mode TOOLS

Select your preferred picture type.

✎ When connecting a PC, the **Picture Mode** is only available the **Standard** and **Entertain**.

- **Dynamic**: Suitable for a bright room.
- **Standard**: Suitable for a normal environment.
- **Movie**: Suitable for watching movies in a dark room.
- **Entertain**: Suitable for watching movies and games.
  ✎ It is only available when connecting a PC.

Adjusting Picture Settings

MENU ▥ → **Picture** → ENTER ↵

Samsung MagicAngle

Adjust screen viewing Angle to optimize screen quality according to your viewing position.

- **Samsung MagicAngle**: When viewing the screen at an angle from below or above by setting the appropriate mode for each position you can obtain a similar picture quality as viewing the screen directly from the front.
  - **Off**: Select when viewing from the front position.
  - **Lean back mode**: Select when viewing from a slightly lower position.
  - **Standing Mode**: Select when viewing from the upper position.
- **Mode**: Adjust screen viewing angle.

✎ When **Samsung MagicAngle** is set to **Lean back mode** or **Standing Mode**, **Gamma** is not available.

Backlight / Contrast / Brightness / Sharpness / Colour / Tint (G/R)

Your television has several setting options for picture quality control.

✎ NOTE

- In analogue **TV, PC, AV** modes of the PAL system, the **Tint (G/R)** function is not available.
- When connecting a PC, you can only make changes to **Backlight**, **Contrast**, **Brightness** and **Sharpness**.
- Settings can be adjusted and stored for each external device connected to the LED display.
- Lowering picture brightness reduces power consumption.

Screen Adjustment

- **Picture Size**: Your cable box / satellite receiver may have its own set of screen sizes as well. However, we highly recommend you use 16:9 mode most of the time.

  16:9: Sets the picture to 16:9 wide mode.

  Wide Zoom: Magnifies the picture size more than 4:3.

  ✎ Adjusts the **Position** by using ▲ / ▼ buttons.

  Zoom: Magnifies the 16:9 wide pictures vertically to fit the screen size.

  ✎ Adjusts the **Zoom** or **Position** by using ▲ / ▼ button.

  4:3: Sets the picture to basic (4:3) mode.

  ✎ Do not watch in 4:3 format for a long time. Traces of borders displayed on the left, right and centre of the screen may cause image retention (screen burn) which are not covered by the warranty.

✎ NOTE

- Depending on the input source, the picture size options may vary.
- The available items may differ depending on the selected mode.
- When connecting a PC, only **16:9** and **4:3** modes can be adjusted.
- Settings can be adjusted and stored for each external device connected to an input on the LED display.

- **Zoom** / **Position**: You can adjust the **Zoom** or **Position** by using (▲ / ▼ / ◀ / ▶) button.
  - It's only available when **Picture Size** is set as **Zoom** and **Wide Zoom**.
  - In **Wide Zoom** mode, you can only use **Position** adjustment.
  - **Reset**: Reset the **Zoom** and **Position** to the default settings.
- **PC Screen Adjustment**
  ✎ Available only **PC** mode.
  - **Coarse** / **Fine**: Removes or reduces picture noise. If the noise is not removed by Fine-tuning alone, then adjust the frequency as best as possible (**Coarse**) and Finetune again. After the noise has been reduced, readjust the picture so that it is aligned to the centre of screen.
  - **Position**: Adjusts the PC screen position with direction button (▲ / ▼ / ◀ / ▶).
  - **Image Reset**: Resets the image to default settings.

Auto Adjustment TOOLS

Frequency values/ position and fine tune are adjusted automatically.

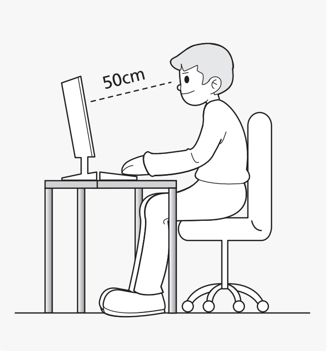
It's only available in **PC** mode.

Using Your TV as a Computer (PC) Display

Setting Up Your PC Software (Based on Windows XP)
Depending on the version of Windows and the video card, the actual screens on your PC may differ in which case the same basic set-up information will almost always be applied. (If not, contact your computer manufacturer or Samsung Dealer.)

1. Click on “Control Panel” on the Windows start menu.
2. Click on “Appearance and Themes” in the “Control Panel” window and a display dialog-box will appear.
3. Click on “Display” and a display dialog box will appear.
4. Navigate to the “Settings” tab on the display dialog-box.
    - The correct size setting (resolution) [Optimum: 1920 X 1080 pixels] (T19B300: 1366 X 768 pixels).
    - If a vertical-frequency option exists on your display settings dialog box, the correct value is “60” or “60 Hz”. Otherwise, just click “OK” and exit the dialog box.

Maintaining the Correct Posture when Using this Product



Maintain the correct posture when using this product.

- Straighten your back.
- Keep a distance of 45~50 cm (15~19 inches) from your eyes to the screen. Look down at the screen and face the screen forwards.
- Adjust the angle of the product so that light is not reflected onto the screen.
- Keep your elbow at a right angle and keep your arm level with the back of your hand.
- Keep your elbow at a right angle.
- Place your heels flat on the ground while keeping your knees at an angle of 90 degrees or higher and maintain the position of your arm so that your arm is below your heart.

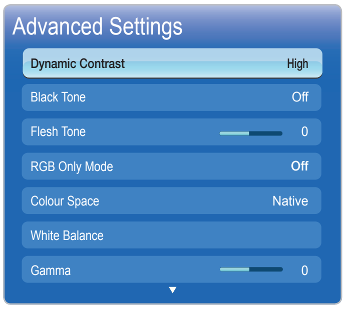
Changing the Picture Options

Advanced Settings

MENU → **Picture** → **Advanced Settings** → ENTER

(**Advanced Settings** are available in **Standard** / **Movie** mode)
Compared to previous models, new Samsung LED display have a more precise picture.

When connecting a PC, you can only make changes to **White Balance** and **Gamma**.



Advanced Settings

Dynamic Contrast	High
Black Tone	Off
Flesh Tone	0
RGB Only Mode	Off
Colour Space	Native
White Balance	
Gamma	0

- **The displayed image may differ depending on the model.**

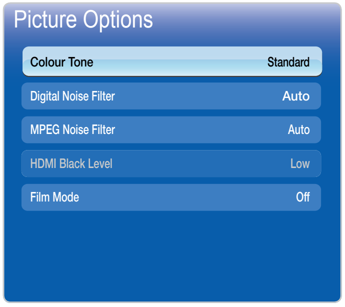
- **Dynamic Contrast (Off / Low / Medium / High)**: Adjust the screen contrast.
- **Black Tone (Off / Dark / Darker / Darkest)**: Select the black level to adjust the screen depth.
- **Flesh Tone**: Emphasize pink “Flesh Tone.”
- **RGB Only Mode (Off / Red / Green / Blue)**: Displays the **Red**, **Green** and **Blue** colour for making fine adjustments to the hue and saturation.
- **Colour Space (Auto / Native)**: Adjust the range of colours available to create the image.
- **White Balance**: Adjust the colour temperature for a more natural picture.

  R-Offset / G-Offset / B-Offset: Adjust each colour’s (red, green, blue) darkness.
  R-Gain / G-Gain / B-Gain: Adjust each colour’s (red, green, blue) brightness.
  Reset: Resets the **White Balance** to it’s default settings.
- **Gamma**: Adjust the primary colour intensity.
- **Motion Lighting (Off / On)**: Reduce power consumption by brightness control.

Picture Options

MENU → **Picture** → **Picture Options** → ENTER

✎ When connecting a PC, you can only make changes to the **Colour Tone**.



Picture Options

Colour Tone: Standard
Digital Noise Filter: Auto
MPEG Noise Filter: Auto
HDMI Black Level: Low
Film Mode: Off

- **The displayed image may differ depending on the model.**

- **Colour Tone (Cool / Standard / Warm1 / Warm2)**
  - ✎ **Warm1** or **Warm2** will be deactivated when the picture mode is **Dynamic**.
  - ✎ Settings can be adjusted and stored for each external device connected to an input on the LED display.
- **Digital Noise Filter (Off / Low / Medium / High / Auto / Auto Visualisation / Demo)**: If the broadcast signal received by your LED display is weak, you can activate the **Digital Noise Filter** feature to reduce any static and ghosting that may appear on the screen.
  - ✎ When the signal is weak, try other options until the best picture is displayed.

  Auto Visualisation: When changing analogue channels, displays signal strength.
  - ✎ Only available for analogue channels.
  - ✎ When bar is green, you are receiving the best possible signal.
- **MPEG Noise Filter (Off / Low / Medium / High / Auto)**: Reduces MPEG noise to provide improved picture quality.
- **HDMI Black Level (Low / Normal)**: Selects the black level on the screen to adjust the screen depth.
  - ✎ Available only in **HDMI** mode (RGB signals).
- **Film Mode (Off / Auto1 / Auto2)**: Sets the LED display to automatically sense and process film signals from all sources and adjust the picture for optimum quality.
  - ✎ Available in TV mode, HDMI (1080i).
  - ✎ If the screen does not seem natural, change its option to **Off** / **Auto1** / **Auto2** in **Film Mode**.

Reset Picture (Yes / No)

Resets your current picture mode to its default settings.

Sound Menu

Changing the Preset Sound Mode

MENU → **Sound** → **Sound Mode** → ENTER

Sound Mode TOOLS

- **Standard**: Selects the normal sound mode.
- **Music**: Emphasizes music over voices.
- **Movie**: Provides the best sound for movies.
- **Clear Voice**: Emphasizes voices over other sounds.
- **Amplify**: Increase the intensity of high-frequency sound to allow a better listening experience for the hearing impaired.

✎ If **Speaker Select** is set to **External Speaker** , **Sound Mode** is disabled.

Adjusting Sound Settings

Sound Effect

MENU → **Sound** → **Sound Effect** → ENTER

(standard sound mode only)

- **SRS TruSurround HD (Off / On)**

  This function provides a virtual 5.1 channel surround sound experience through a pair of speakers using HRTF (Head Related Transfer Function) technology.
- **SRS TruDialog (Off / On)**

  This function allows you to increase the intensity of a voice over background music or sound effects so that dialog can be heard more clearly.
- **Equaliser**

  Adjusts the sound mode.
  - **Balance L/R**: Adjusts the balance between the right and left speaker.
  - **100Hz / 300Hz / 1kHz / 3kHz / 10kHz** (Bandwidth Adjustment): Adjusts the level of specific bandwidth frequencies.
  - **Reset**: Resets the equaliser to its default settings.

Sound Systems, Etc.

MENU → **Sound** → ENTER

- **SPDIF Output**: SPDIF (Sony Philips Digital InterFace) is used to provide digital sound, reducing interference going to speakers and various digital devices such as a DVD player.
  - **Audio Format**: You can select the Digital Audio output (SPDIF) format.
    ✎ The available Digital Audio output (SPDIF) format may differ depending on the input source.
  - **Audio Delay**: Correct audio-video sync problems, when watching TV or video, and when listening to digital audio output using an external device such as an AV receiver (0ms ~ 250ms).

  (It's not available for TB300 series.)

Speaker Settings

- **Speaker Select (External Speaker / TV Speaker):**A sound echo may occur due to a difference indecoding speed between the main speaker and theaudio receiver. In this case, set the TV to **External Speaker**.
  ✎ When **Speaker Select** is set to **External Speaker**, the volume and MUTE buttons will not operate and the sound settings will be limited.
  ✎ When **Speaker Select** is set to **External Speaker**.
  - **TV Speaker**: **Off**, **External Speaker**: **On**

  ✎ When **Speaker Select** is set to **TV Speaker**.
  - **TV Speaker**: **On**, **External Speaker**: **On**

  ✎ If there is no video signal, both speakers will be mute.
  ✎ It's not available for TB300 series.
- **Auto Volume (Off / Normal / Night)**: To equalize the volume level on each channel, set to **Normal**.

  Night: This mode provides an improved sound experience compared to **Normal** mode, making almost no noise. It is useful at night.

Reset Sound (Yes / No)

Reset all sound settings to the factory defaults.

System Menu

Setting the Time

MENU → **System** → ENTER

Time

- **Clock Set**: Set the Day, Month, Year, Hour and Minute manually.
  ✎ You can set the Day, Month, Year, Hour and Minute directly by pressing the number buttons on the remote control.

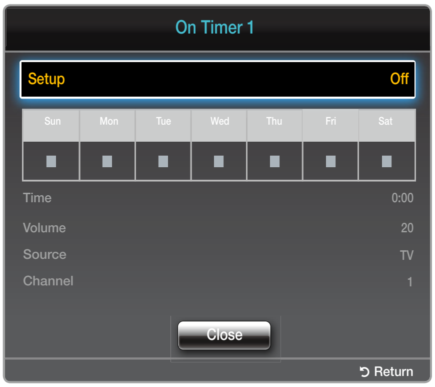
Using the Sleep Timer

- **Sleep Timer** TOOLS : Automatically shuts off the LED display after a preset period of time. (30, 60, 90, 120, 150 and 180 minutes).
  ✎ To cancel **Sleep Timer**, select **Off**.

Setting the On / Off Timer

- **On Timer**

  On Timer 1 / On Timer 2 / On Timer 3 : Three different on timer settings can be made. You must set the clock first.



On Timer 1

Setup: Off

Time: 0:00

Volume: 20

Source: TV

Channel: 1

- **The displayed image may differ depending on the model.**

Setup: Select **Off**, **Once**, **Everyday**, **Mon~Fri**, **Mon~Sat**, **Sat~Sun** or **Manual** to set at your convenience. If you select **Manual**, you can set up the day you want to activate the timer.

✎ The ✓ mark indicates the day you've selected.

Time: Set the hour and minute.

Volume: Set the desired volume level.

Source: Select a desired input source when the LED display is turned on automatically. (**USB** can be selected only when a USB device is connected to the LED display)

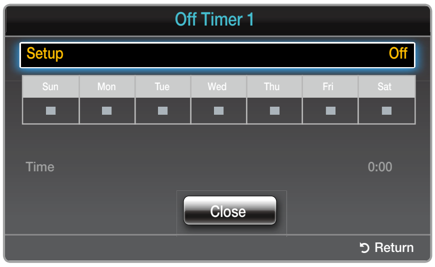
Music / **Photo** (when the **Source** is set to **USB**): Select a folder in the USB device containing music or photo files to be played when the LED display is turned on automatically.

✎ NOTE

- If there is no music file on the USB device or the folder containing a music file is not selected, the Timer function does not operate correctly.
- When there is only one photo file in the USB, the Slide Show will not play.
- If a folder name is too long, the folder cannot be selected.
- Each USB you use is assigned its own folder. When using more than one of the same type of USB, make sure the folders assigned to each USB have different names.
- It is recommended that you use a USB memory stick and a multi card reader when using **On Timer**.
- The **On Timer** function may not work with USB devices with a built-in battery, MP3 players, or PMPs made by some manufacturers because these devices take a long time to be recognized.

- **Off Timer**

Off Timer 1 / Off Timer 2 / Off Timer 3: Three different off timer settings can be made. You must set the clock first.



Setup Off

Time 0:00

- **The displayed image may differ depending on the model.**

Setup: Select **Off**, **Once**, **Everyday**, **Mon~Fri**, **Mon~Sat**, **Sat~Sun** or **Manual** to set at your convenience. If you select **Manual**, you can set up the day you want to activate the timer.

✎ The ✓ mark indicates the day you've selected.

Time: Set the hour and minute.

Locking Programmes

MENU ▥ → **System** → **Security** → ENTER ↵

Security

✎ The PIN input screen appears before the setup screen.

✎ Enter your 4-digit PIN, the default of which is “0-0-0-0”. Change the PIN using the **Change PIN** option.

- **Channel Lock (Off / On)**: Lock channels in **Channel Manager**, to prevent unauthorized users, such as children, from watching unsuitable programme.

  ✎ Available only when the input **Source** is set to **TV**.
- **Change PIN**: The **Change PIN** screen will appear. Choose any 4 digits for your PIN and enter them. Change your personal ID number required to set up the LED display. Re-enter the same 4 digits. When the Confirm screen disappears, your PIN has been memorised.

Economical Solutions

MENU ▥ → **System** → **Eco Solution** → ENTER ↵

Eco Solution

- **Energy Saving (Off / Low / Medium / High / Picture Off)**: This adjusts the brightness of the LED display in order to reduce power consumption. If you select **Picture Off**, the screen is turned off, but the sound remains on. Press any button except volume button to turn on the screen.
- **No Signal Power Off (Off / 15 min / 30 min / 60 min)**: To avoid unnecessary energy consumption, set how long you want the LED display to remain on if it’s not receiving a signal.

  ✎ Disabled when the PC is in power saving mode.
- **Auto Power Off (Off / On)**: Saves power by turning LED display off automatically when no user operation is received for 4 hours.

Basic Features

Other Features

MENU ⊞ → **System** → ENTER ↵

Menu Language

Set the menu language.

1. Select Menu Language and press the **ENTER** ↵ button.
2. Choose desired language and press the **ENTER** ↵ button.

Auto Protection Time

- ■ **Off / 2 hours / 4 hours / 8 hours / 10 hours**: If the screen remains idle with a still image for a certain period of time defined by the user, the screen saver is activated to prevent the formation of ghost images on the screen.

General

- ■ **Max. Power Saving(Off/On):** Turn off PC monitor when PC is not used for certain length of time to reduce power consumption.
- ■ **Game Mode (Off / On)**: When connecting to a game console such as PlayStation™ or Xbox™, you can enjoy a more realistic gaming experience by selecting game mode.

✎ **NOTE**

- Precautions and limitations for game mode
  - To disconnect the game console and connect another external device, set **Game Mode** to **Off** in the setup menu.
  - If you display the LED display menu in **Game Mode**, the screen shakes slightly.
- **Game Mode** is not available when the input source is set to TV or PC.
- After connecting the game console, set **Game Mode** to **On**. Unfortunately, you may notice reduced picture quality.
- If **Game Mode** is **On**:
  - **Picture** mode is set to **Standard** and **Sound** mode is set to **Movie**.

- ■ **Panel Lock (Off / On)**: Lock or unlock all the keys on the front panel at once. When Panel Lock is on, none of the keys on the front panel operate.
- ■ **Boot Logo (Off / On)**: Display Samsung logo when the LED display is turned on.

Picture In Picture (PIP)

MENU ⊞ → **System** → **PIP** → ENTER ↵

PIP TOOLS

You can watch the LED display tuner and one external video source simultaneously. **PIP** (Picture-in-Picture) does not function in the same mode.

✎ **NOTE**

- For PIP sound, refer to the **Sound Select** instructions.
- If you turn the LED display off while watching in **PIP** mode, the PIP window will disappear.
- You may notice that the picture in the PIP window becomes slightly unnatural when you use the main screen to view a game or karaoke.
- While **Program Rating Lock** is in operation, the PIP function cannot be used.
- PIP settings

Main picture	Sub picture
HDMI, HDMI/DVI, Component, PC	**TV**

- ■ **PIP (Off / On)**: Activate or deactivate the PIP function.
- ■ **Channel**: Select the channel for the sub-screen.
- ■ **Size (◲ / ◲)**: Select a size for the sub-picture.
- ■ **Position (◲ / ◳ / ◰ / ◱)**: Select a position for the sub-picture.
- ■ **Sound Select (Main / Sub)**: You can choose the desired sound (**Main / Sub**) in **PIP** mode.

DivX® Video On Demand

Shows the registration code authorized for the TV. If you connect to the DivX web site and register, you can download the VOD registration file. If you play the VOD registration using Media contents, the registration is completed.

✎ For more information on DivX® VOD, visit “http://vod.divx.com”.

Support Menu

MENU ⊞ → **Support** → ENTER ↵

Self Diagnosis

✎ **Self Diagnosis** might take few seconds, this is part of the normal operation of the LED display

- **Picture Test (Yes / No)**: Use to check for picture problems.

  Yes: If the test pattern does not appear or there is noise in the test pattern, select **Yes**. There may be a problem with the LED display. Contact Samsung's Call Centre for assistance.

  No: If the test pattern is properly displayed, select **No**. There may be a problem with your external equipment. Please check your connections. If the problem persists, refer to the external device's user manual.

- **Sound Test (Yes / No)**: Use the built-in melody sound to check for sound problems.

  Yes: If you can hear sound only from one speaker or not at all during the sound test, select **Yes**. There may be a problem with the LED display. Contact Samsung's Call Centre for assistance.

  No: If you can hear sound from the speakers, select **No**. There may be a problem with your external equipment. Please check your connections. If the problem persists, refer to the external device's user manual.

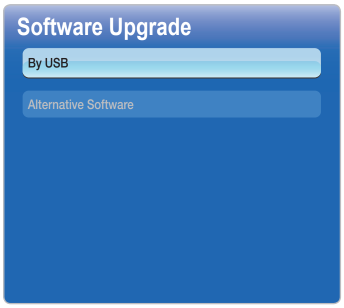
- **Reset**: Restores all settings to factory defaults except network settings.

Software Upgrade

Software Upgrade can be performed via a broadcasting signal or downloading the latest firmware from "www.samsung.com," to a USB memory device.

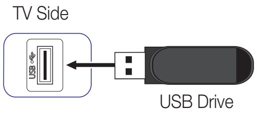
Current Version the software already installed in the LED display.

✎ Software is represented as "Year/Month/Day_Version".



- The displayed image may differ depending on the model.

Installing the Latest Version



- **By USB**: Insert a USB drive containing the firmware upgrade file, downloaded from "www.samsung.com," into the TV. Please be careful not to disconnect the power or remove the USB drive until upgrades are complete. The TV will be turned off and on automatically after completing the firmware upgrade. When software is upgraded, video and audio settings you have made will return to their default settings. We advise you to write down your settings so that you can easily reset them after the upgrade.
- **Alternative Software**: Replace the current software with the alternative.

Contact Samsung

View this information when your LED display does not work properly or when you want to upgrade the software. You can find information regarding our call centres, and how to download products and software.

Contents Home

You can enjoy useful and various contents.

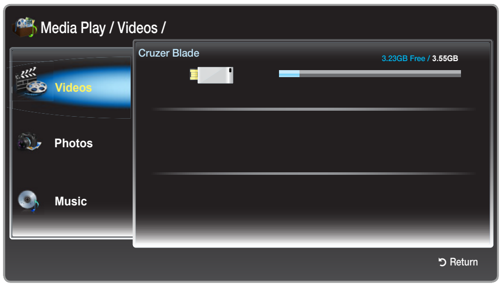
Advanced Features

Using the Media Play

Enjoy videos, photos, music files saved on a USB Mass Storage Class (MSC) device.

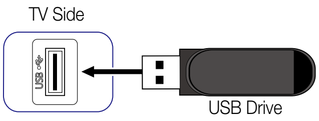
Press the MEDIA.P button, choose **Media Play**, then press the ENTER ↵ button.

MEDIA.P → **Media Play** → ENTER ↵



- **The displayed image may differ depending on the model.**

Connecting a USB Device



1. Turn on your TV.
2. Connect a USB device containing photo and music files to the USB jack on the side of the TV.
3. When USB is connected to the TV, popup window appears. Then you can select **Device connected**.

✎ It might not work properly with unlicenced multimedia files.

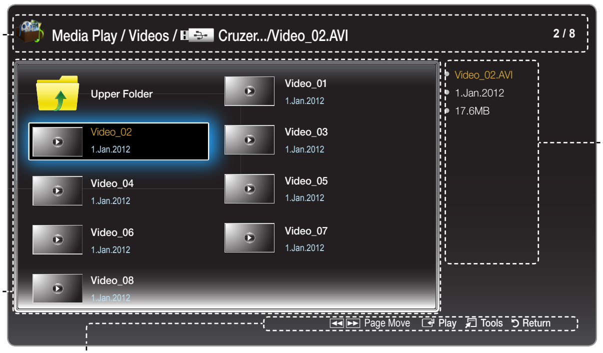
✎ Need-to-Know List before using **Media Play**.

- MTP (Media Transfer Protocol) is not supported.
- The file system supports FAT16, FAT32 and NTFS.
- Certain types of USB Digital camera and audio devices may not be compatible with this TV.
- **Media Play** only supports USB Mass Storage Class (MSC) devices. MSC is a Mass Storage Class Bulk-Only Transport device. Examples of MSC are Thumb drives and Flash Card Reader (USB HUB are not supported). Devices should be connected directly to the TV's USB port.
- USB (HDD) is not supported.
- Before connecting your device to the TV, please back up your files to prevent them from damage or loss of data. SAMSUNG is not responsible for any data file damage or data loss.
- Do not disconnect the USB device while it is loading.
- The higher the resolution of the image, the longer it takes to display on the screen.
- The maximum supported JPEG resolution is 15360X8640 pixels.
- For unsupported or corrupted files, the "Not Supported File Format" message is displayed.
- MP3 files with DRM that have been downloaded from a non-free site cannot be played. Digital Rights Management (DRM) is a technology that supports the creation, distribution and management of the content in an integrated and comprehensive way, including the protection of the rights and interests of the content providers, the prevention of the illegal copying of contents, as well as managing billings and settlements.
- A USB device that requires high power (more than 500mA or 5V) may not be supported.
- If an over-power warning message is displayed while you are connecting or using a USB device, the device may not be recognized or may malfunction.

- If the TV has been no input during time set in **Auto Protection Time**, the Screensaver will run.
- The power-saving mode of some external hard disk drives may be released automatically when connected to the TV.
- If a USB extension cable is used, the USB device may not be recognized or the files on the device may not be read.
- If a USB device connected to the TV is not recognized, the list of files on the device is corrupted or a file in the list is not played, connect the USB device to the PC, format the device and check the connection.
- **Media Play** only supports sequential jpeg format.

Screen Display

Move to the desired file using the ▲ / ▼ / ◄ / ► buttons and then press the **ENTER**⏎ button. The file is played. **Media Play** screen may differ depending on the way to enter the screen.


Media Play / Videos / Cruzer.../Video_02.AVI
2 / 8
Upper Folder
Video_01
1.Jan.2012
Video_02
1.Jan.2012
Video_03
1.Jan.2012
Video_04
1.Jan.2012
Video_05
1.Jan.2012
Video_06
1.Jan.2012
Video_07
1.Jan.2012
Video_08
1.Jan.2012
Video_02.AVI
1.Jan.2012
17.6MB
◄◄ ►► Page Move
⏎ Play
Tools
↩ Return

Information: Displays the selected content category (Music, for example), device (USB drive,for example), folder/file name and page.

Contents mode: You can select the desired Content Category.

Displays the selected file information.

- **The displayed image may differ depending on the model.**

Operation Buttons

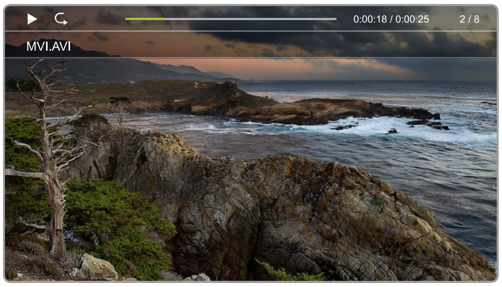
- ►► Turn to the next page. Only available in **Music**.
- ◄◄ Turn to the previous page. Only available in **Music**.
- ⏎ **Play**: Play the media file.
- **Tools**: Displays the option menu.
- ↩ **Return**: Move to the previous step.

Videos

Playing Video

1. Press the ◄ / ► / ▲ / ▼ button to select the desired video in the file list.
2. Press the **ENTER**↵ button or ► (Play) button.
   - The selected file name is displayed on the top with its playing time.
   - If video time information is unknown, play time and progress bar are not displayed.
   - During video playback, you can search using ◄ and ► button.
   - You can use ◄◄ (REW) and ►► (FF) buttons during playback.

   ✎ In this mode, you can enjoy movie clips contained on a Game, but you cannot play the Game itself.



- **The displayed image may differ depending on the model.**

Supported Subtitle Formats

– **External**

Name	Extension
MPEG-4 Timed text	.ttxt
SAMI	.smi
SubRip	.srt
SubViewer	.sub
Micro DVD	.sub or .txt
SubStation Alpha	.ssa
Advanced SubStation Alpha	.ass
Powerdivx	.psb

– **Internal**

Name	Container
Xsub	AVI
SubStation Alpha	MKV
Advanced SubStation Alpha	MKV
SubRip	MKV
MPEG-4 Timed text	MP4

Advanced Features

Supported Video Formats

File Extension	Container	Video Codec	Resolution	Frame rate (fps)	Bit rate (Mbps)	Comments	Audio Codec
*.avi *.mkv *.asf *.wmv *.mp4 *.3gp *.vro *.mpg *.mpeg *.ts *.tp *.trp *.m2ts *.mts *.divx	AVI MKV ASF MP4 3GP VRO VOB PS TS	DivX 3.11 / 4.x / 5.1 / 6.0	1920 x 1080	30	20 [40]	• GMC Not Support	AC3 LPCM ADMPCM (IMA, MS) AAC HE-AAC WMA DD+ MPEG(MP3) DTS Core Vorbis
		MPEG4 SP / ASP					
		H.264 BP / MP / HP				• Not Include FMO / ASO / RS • Support BP / MP / HP Level 4.1	
		H.263				• Profile3, restricted up to SD resolution	
		Motion JPEG	640 x 480		10		
		Window Media Video v9	1920 x 1080		20 [40]	• VC1 SP / MP /A P L3 Support, L4 Not Support • Simple Profile Medium Level • Main Profile High Level • Advanced Profile Level 3 • WMV9 support	
		MPEG2				• Hight Profile High Level	
		MPEG1				• MPEG-1 except D-picture	

Advanced Features

Other Restrictions

✎ NOTE

- If there are problems with the contents of a codec, the codec will not be supported.
- If the information for a Container is incorrect and the file is in error, the Container will not be able to play correctly.
- Sound or video may not work if the contents have a standard bitrate/frame rate above the compatible Frame/ sec listed in the table above.
- If the Index Table is in error, the Seek (Jump) function is not supported.
- You may experience file stuttering while playing a video through a network connection.

Name	Format
• Supports up to H.264, Level 4.1 • H.264 FMO / ASO / RS, VC1 SP / MP / AP L4 and AVCHD are not supported. • MPEG4 SP, ASP: – Below 1280 x 720: 60 frame max – Above 1280 x 720: 30 frame max • GMC 2 over is not supported.	• Supports up to WMA 7, 8, 9, STD , 9, 10PRO • WMA 9 PRO does not support 2 channel excess multi channel or lossless audio. • WMA sampling rate 22050Hz mono is not supported.

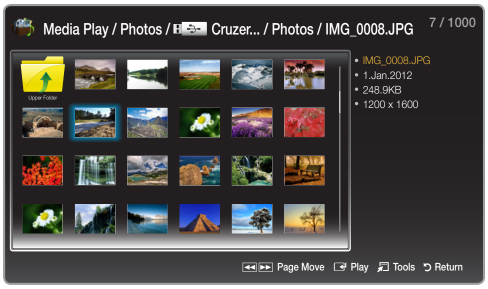
Photos

Viewing a Photo (or Slide Show)

1. Press the ▲ / ▼ / ◀ / ▶ button to select the desired photo in the file list.
2. Press the **ENTER**↵ button or ▶ button.
   - When a selected photo is displayed, press the **ENTER**↵ button to start the slide show.
   - During the slide show, all files in the file list will be displayed in order.

✎ Music files can be automatically played during the Slide Show if the **Background Music** is set to **On**.

✎ The **Background Music** cannot be changed until the BGM has finished loading.



- **The displayed image may differ depending on the model.**

Supported Picture Formats

File Extension	Format	Resolution
*.jpg	JPEG	15360 x 8640
*.bmp	BMP	1920 x 1080
*.mpo	MPO	15360 x 8640

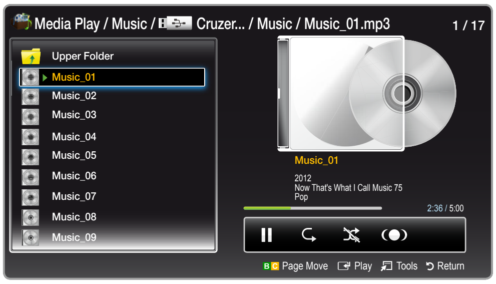
Music

Playing Music

1. Press the ▲ / ▼ button to select the desired **Music** in the file list.
2. Press the ENTER ⏎ button or ▶ button.

✎ Only displays the files with the file extension in following supported music formats list. Other file extensions are not displayed, even if they are saved on the same USB device.

✎ If the sound is abnormal when playing MP3 files, adjust the **Equaliser** in the **Sound** menu. (An over-modulated MP3 file may cause a sound problem.)


Media Play / Music / Cruzer... / Music / Music_01.mp3
1 / 17
Upper Folder
Music_01
Music_02
Music_03
Music_04
Music_05
Music_06
Music_07
Music_08
Music_09
Music_01
2012
Now That's What I Call Music 75
Pop
2:36 / 5:00
B C Page Move
Play
Tools
Return

- **The displayed image may differ depending on the model.**

Playing selected music

1. Press the TOOLS button and select **Play selection**.
2. Select music files.
   ✎ The ✓ mark will appears to the left of the selected files.
   ✎ To select or deselect all files, press **Select All** or **Desletect All**.
3. Press the ▶ button to select the **Play** button.
4. The selected files will be played in sequence.

Supported Music Formats

File Extension	Type	Codec
*.mp3	MPEG	MPEG1 Audio Layer 3
*.m4a *.mpa *.aac *.3ga	MPEG4	AAC
*.flac	FLAC	FLAC
*.ogg	OGG	Vorbis
*.wma	WMA	WMA

Media Play - Additional Functions

Videos/Photos/Music Play Option menu

Press the **TOOLS** button and select selection play.

Category	Operations	Videos	Photos	Music
Shuffle Mode	You can play the music randomly.			✓
Repeat Mode	You can play media files repeatedly.	✓		✓
Picture Mode	You can adjust the picture setting.	✓	✓	
Sound Mode	You can adjust the sound setting.	✓	✓	✓
Start Slide Show / Stop Slide Show	You can start or pause a Slide Show.		✓	
Slide Show Speed	You can select the slide show speed during the slide show.		✓	
Background Music On	You can on/off background music when watching a Slide Show.		✓	
Background Music Setting	You can select background music when watching a Slide Show.		✓	
Zoom	You can zoom into images in full screen mode.		✓	
Rotate	You can rotate images in full screen mode.		✓	
Information	You can see detailed information about the played file.	✓	✓	✓
Play Selection	You can play the items what you selected.	✓	✓	✓
Title Search	You can move directly to another Title.	✓		
Time Search	You can search the movie using ◀ and ▶ buttons at intervals of 1 minute.	✓		
Picture Size	You can adjust the picture size to your preference.	✓		
Subtitle	You can set the subtitle On / Off.	✓		
Subtitle Settings	Play a video file with captions displayed. This option is available only when the caption file name matches the video file name.	✓		
Audio language	View a video in a supported language of your choice. The option is available only when a stream-type file that supports multiple audio formats is played.	✓		

Other Information

Analogue Channel Teletext Feature

The index page of the Teletext service gives you information on how to use the service. For Teletext information to be displayed correctly, channel reception must be stable. Otherwise, information may be missing or some pages may not be displayed.

✎ You can change Teletext pages by pressing the numeric buttons on the remote control.

❶ ≣/≣ (Teletext on/mix/off): Activates the Teletext mode for the current channel. Press the button twice to overlap the Teletext mode with the current broadcasting screen. Press it one more time to exit teletext.

❷ ≣ (store): Stores the Teletext pages.

❸ ≣ (index): Displays the index (contents) page at any time while you are viewing Teletext.

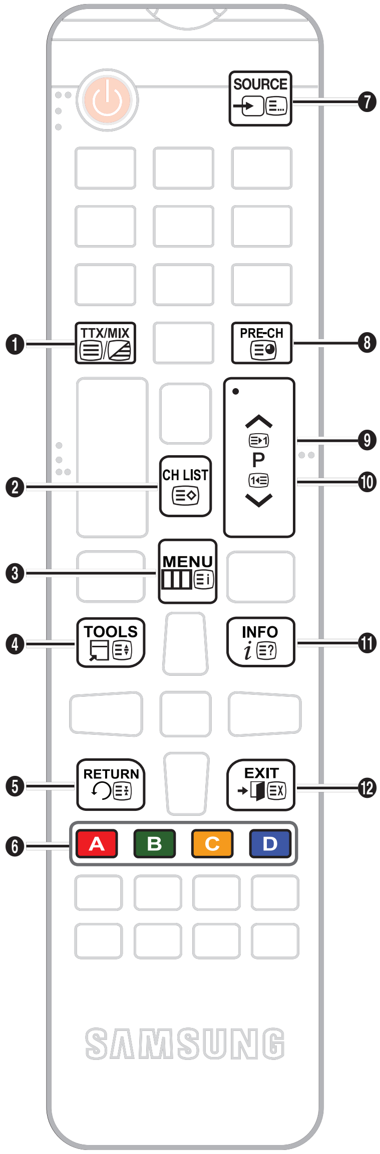
❹ ≣ (size): Displays the teletext on the upper half of the screen in double-size. To move the text to the lower half of the screen, press it again. For normal display, press it once again.

❺ ≣ (hold): Holds the display at the current page, in the case that there are several secondary pages that follow automaticially. To undo, press it again.

❻ Colour buttons (red, green, yellow, blue): If the FASTEXT system is used by the broadcasting company, the different topics on a Teletext page are colour-coded and can be selected by pressing the coloured buttons. Press the colour corresponding to the topic of your choice. A new colour-coded page is displayed. Items can be selected in the same way. To display the previous or next page, press the corresponding coloured button.

❼ ≣ (mode): Selects the Teletext mode (LIST/ FLOF).

If pressed during LIST mode, switches the mode to List save mode. In List save mode, you can save a Teletext page into a list using the ≣(store) button.



❽ ≣ (sub-page): Displays the available sub-page.

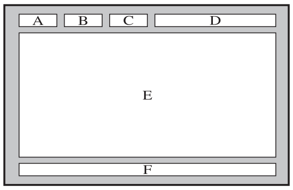
❾ ≣ (page up): Displays the next Teletext page.

❿ ≣ (page down): Displays the previous Teletext page.

⓫ ≣ (reveal): Displays the hidden text (answers to quiz games, for example). To display the normal screen, press it again.

⓬ ≣ (cancel): Shrinks the Teletext display to overlap with the current broadcast.

Typical Teletext page



Part	Contents
A	Selected page number.
B	Broadcasting channel identity.
C	Current page number or search indications.
D	Date and time.
E	Text.
F	Status information. FASTEXT information.

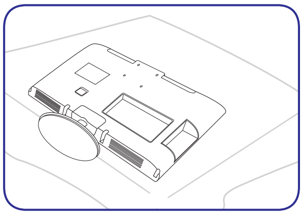
✎ The feature may not available in some locations.

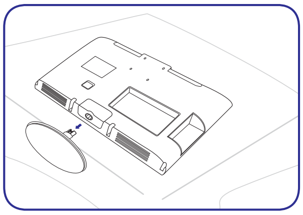
Other Information

Attaching a Wall Mount/Desktop Stand

Preparing before installing Wall-Mount/Desktop Stand

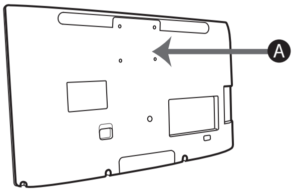
1. Turn the product off and unplug the power cord from the wall outlet.
2. Place a soft cloth or cushion on a flat surface to protect the panel and place the product face down.
3. Hold the main body of the product with your hand. Pull the stand in the direction of the arrow as shown in the figure to separate it.



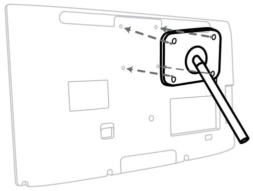


Attaching a Wall Mount/Desktop Stand

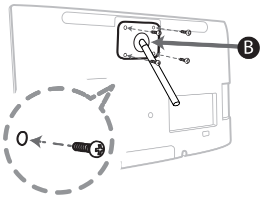
❶



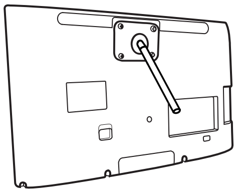
❷



❸



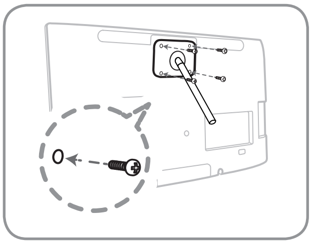
❹



Ⓐ Wall/Desktop Stand Mount

Ⓑ Wall mount kit/desktop stand (not supplied)

⚠ Caution



Important

For the installation of Wall-mount, please don't use screws longer than 14mm(L14) of longitude.

4. Align wall mount/desktop stand to the Monitor/LED display and firmly fix the wall mount/desktop stand by fastening the screw.
5. Align the groove of the part of the product that is to be connected to the stand with the groove in the stand (desk-top stand, wall mount stand or another stand) and firmly fix the stand by fastening the screw.

Other Information

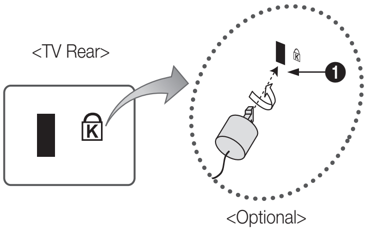
✎ NOTE

- If you use screws that are longer than the standard specifications, the inside of the product may be damaged.
- For wall mounts that are not compatible with the standard VESA specifications, the length of the screw may differ depending on the corresponding specifications.
- Avoid using screws that are incompatible with the standard VESA specifications and avoid assembling them using excessive force. This may result in damage to the product or injury due to the product falling. Samsung shall not be held liable for any damage or injury.
- Samsung shall not be held liable for any damage to the product or injury caused by using a wall mount/desktop stand that is not compatible with the specifications or due to an installation not performed by an authorized installation engineer.
- When installing the product using a wall mount, purchase a wall mount that provides at least 10 cm (3.93 inches) of space from the wall.
- Use the wall mount according to the international specifications.

Anti-theft Kensington Lock

The Kensington Lock is not supplied by Samsung. It is a device used to physically fix the system when using it in a public place. The appearance and locking method may differ from the illustration depending on the manufacturer. Refer to the manual provided with the Kensington Lock for additional information on proper use.

✎ Please find a “K” icon on the rear of the LED display. A kensington slot is beside the “K” icon.



To lock the product, follow these steps:

1. Wrap the Kensington lock cable around a large, stationary object such as desk or chair.
2. Slide the end of the cable with the lock attached through the looped end of the Kensington lock cable.
3. Insert the locking device into the Kensington slot on the product (❶).
4. Lock the lock.

✎ These are general instructions. For exact instructions, see the User manual supplied with the locking device.

✎ The locking device has to be purchased separately.

✎ The location of the Kensington slot may be different depending on the LED display model.

Other Information

Troubleshooting

If you have any questions about the LED display, first refer to this list. If none of these troubleshooting tips apply, please visit “www.samsung.com,” then click on Support, or contact the call centre listed on the back-cover of this manual.

Issues	Solutions and Explanations
Picture Quality	First of all, please perform the **Picture Test** and confirm that your LED display is properly displaying test image. (go to MENU - **Support** - **Self Diagnosis** - **Picture Test**) If the test image is properly displayed, the poor picture may caused by the source or signal.
The LED display image does not look as good as it did in the store.	• If you have an analogue cable/set top box, upgrade to a digital set top box. Use HDMI to deliver HD (high definition) picture quality. • Cable/Satellite subscribers: Try HD stations from the channel line up. • Antenna connection: Try HD stations after performing Auto tuning. ✎ Many HD channels are up scaled from SD(Standard Definition) contents. • Adjust the Cable/Set top box video output resolution to 1080i or 720p. • Make sure you are watching the LED display at the minimum recommended distance based on the size and definition of the signal.
The picture is distorted: macroblock error, small block, dots, pixelization	• Compression of video contents may cause picture distortion especially in fast moving pictures such as sports and action movies. • Low signal level or bad quality can cause picture distortion. This is not a LED display issue. • Mobile phones used close to the LED display (cca up to 1m) may cause noise in picture on analogue and digital LED display.
There is poor colour or brightness.	• Adjust the Picture options in the LED display menu. (go to **Picture Mode** / **Colour** / **Brightness** / **Sharpness**) • Adjust **Energy Saving** option in the LED display menu. (go to MENU - **System** - **Eco Solution** - **Energy Saving**) • Try resetting the picture to view the default picture settings. (go to MENU - **Picture** - **Reset Picture**)
There is a dotted line on the edge of the screen.	• Change cable/satellite box resolution.
When changing channels, the picture freezes or is distorted or delayed.	• If connected with a cable box, please try to reset the cable box. Reconnect the AC cord and wait until the cable box reboots. It may take up to 20 minutes. • Set the output resolution of the cable box to 1080i or 720p.
Sound Quality	First of all, please perform the **Sound Test** to confirm that your LED display audio is properly operating. (go to MENU - **Support** - **Self Diagnosis** - **Sound Test**) If the audio is **OK**, the sound problem may caused by the source or signal.
There is no sound or the sound is too low at maximum volume.	• Please check the volume of the device (Cable/Sat Box, DVD, Blu-ray etc) connected to your LED display.
The picture is good but there is no sound.	• If you are using a DVI to HDMI cable, LED display set does not support audio. • Reboot the connected device by reconnecting the device’s power cable. • If your LED display has a headphone jack, make sure there is nothing plugged into it.
The speakers are making an inappropriate noise.	• For antenna or cable connections, check the signal strength. Low signal level may cause sound distortion.
No Picture, No Video	
The LED display will not turn on.	• Make sure the AC power cord is securely plugged in to the wall outlet and the LED display. • Make sure the wall outlet is working. • Try pressing the POWER button on the LED display to make sure the problem is not the remote. If the LED display turns on, refer to “The remote control does not work” below.
The LED display turns off automatically.	• Ensure the **Sleep Timer** is set to **Off** in the **Time** menu. • If your PC is connected to the LED display, check your PC power settings. • Make sure the AC power cord is plugged in securely to the wall outlet and the LED display. • When watching LED display from an antenna or cable connection, the LED display will turn off after 15 ~ 60 minutes if there is no signal.

Other Information

Issues	Solutions and Explanations
There is no picture/video.	• Check cable connections (remove and reconnect all cables connected to the LED display and external devices). • Set your external devices' (Cable/Set top Box, DVD, Blu-ray etc) video outputs to match the connections to the LED display input. For example, if an external device's output is HDMI, it should be connected to an HDMI input on the LED display. • Make sure your connected devices are powered on. • Be sure to select the LED display correct source by pressing the **SOURCE** button on the LED display remote. • Reboot the connected device by reconnecting the device's power cable.
RF(Cable/Antenna) Connection	
The LED display is not receiving all channels.	• Make sure the Antenna cable is connected securely. • Please try **Setup** (Initial setup) to add available channels to the channel list. Go to **MENU** - **System** - **Setup** (Initial setup) and wait for all available channels to be stored. • Verify the Antenna is positioned correctly.
The picture is distorted: macro block error small block, dots, pixelization.	• Compression of video contents may cause picture distortion, especially on fast moving pictures such as sports and action movies. • A low signal can cause picture distortion. This is not a LED display issue.
Others	
The picture will not display in full screen.	• HD channels will have black bars on either side of the screen when displaying up scaled SD (4:3) contents. • Black bars on the top and bottom will appear during movies that have aspect ratios different from your LED display. • Adjust the picture size options on your external device or LED display to full screen.
The remote control does not work.	• Replace the remote control batteries with the poles (+/–) in the right direction. • Clean the sensor's transmission window on the remote. • Try pointing the remote directly at the LED display from 5~6 feet away.
The cable/set top box remote control doesn't turn the LED display on or off, or adjust the volume.	• Programme the Cable/Set top box remote control to operate the LED display. Refer to the Cable/Set user manual for the SAMSUNG LED display code.
A "**Mode Not Supported**" message appears.	• Check the supported resolution of the LED display, and adjust the external device's output resolution accordingly.
There is a plastic smell from the LED display.	• This smell is normal and will dissipate over time.
The LED display **Signal Information** is unavailable in the **Self Diagnosis** Test menu.	• This function is only available with digital channels from an Antenna / RF / Coax connection.
LED display is tilted to the right or left side.	• Remove the stand base from the LED display and reassemble it.
There are difficulties assembling the stand base.	• Make sure the LED display is placed on a flat surface. If you can not remove the screws from the LED display, please use a magnetized screw driver.
The **Channel** menu is grey out (unavailable).	• The **Channel** menu is only available when the LED display source is selected.
Your settings are lost after 30 minutes or every time the LED display is turned off.	• If the LED display is in the **Store Demo** mode, it will reset audio and picture settings every 30 minutes. Change the settings from **Store Demo** mode to **Home Use** mode in the **Setup** (Initial setup) procedure. Press the **SOURCE** button to select TV mode, and go to **MENU** → **System** → **Setup** (Initial setup) → **ENTER** ↵.
You have intermittent loss of audio or video.	• Check the cable connections and reconnect them. • Loss of audio or video can be caused by using overly rigid or thick cables. Make sure the cables are flexible enough for long term use. If mounting the LED display to the wall, we recommend using cables with 90 degree connectors.
You see small particles when you look closely at the edge of the frame of the LED display.	• This is part of the product's design and is not a defect.

Other Information

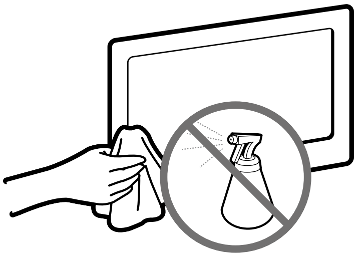
Issues	Solutions and Explanations
The **PIP** menu is not available.	• **PIP** functionality is only available when you are using a HDMI,HDMI/DVI,PC or Component source.
There are recurrent picture/sound issues.	• Check and change the signal/source.
A reaction may occur between the rubber cushion pads on the base stand and the top finish of some furniture.	• To prevent this, use felt pads on any surface of the LED display that comes in direct contact with furniture.

✎ This panel uses a panel consisting of sub pixels which require sophisticated technology to produce. However, there may be a few bright or dark pixels on the screen. These pixels will have no impact on the performance of the product.

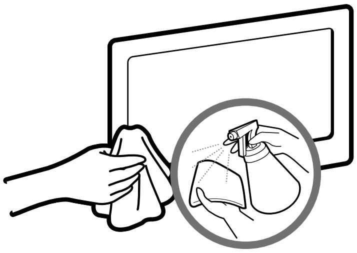
Storage and Maintenance

✎ If you attched some stickers on the LED display screen, it remains some debris after removing the sticker. Please clean it to watch LED display.

✎ The exterior and screen of the product can get scratched during cleaning. Be sure to wipe the exterior and screen carefully using the cloth provided or a soft cloth to prevent scratches.

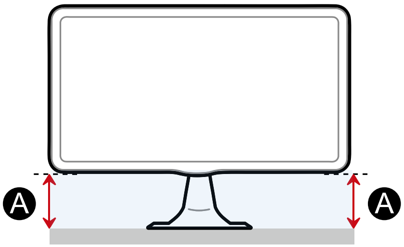


Do not spray water or a cleaning agent directly onto the product. Any liquid that goes into the product may cause a failure, fire, or electric shock.



Clean the product with a soft cloth dapped in a small amount of water.

⚠ **CAUTION**



If the height of "Ⓐ" on one side is different from the other side, adjust the heights.

Other Information

Licence

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TheaterSound HD technology is incorporated under license form SRS Lab, Inc.

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2.0 Channel

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(Only available in TB300 series)

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(Only available in TB350 series)

DivX Certified to play DivX video up to HD 1080p, including premium content.

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ABOUT DIVX VIDEO-ON-DEMAND: This DivX Certified® device must be registered in order to play DivX Video-on-Demand (VOD) content.
To generate the registration code, locate the DivX VOD section in the device setup menu.
Go to vod.divx.com with this code to complete the registration process and learn more about DivX VOD. Pat. 7,295,673; 7,460,688; 7,519,274

Open source licence notice

In the case of using open source software, Open Source licence are available on the product menu.

Open Source Licence Notice is written only English.

Other Information

Specifications

Environmental considerations	Operating	Temperature : 50°F ~ 104°F (10°C ~ 40°C) Humidity : 10 % ~ 80 %. non-condensing
	Storage	Temperature : -4°F ~ 113°F (-20°C ~ 45°C) Humidity : 5 % ~ 95 %. non-condensing
Tilt		-1°(±2°) ~ 20°(±2°)

Model Name		T19B300	T23B350
Screen Size (Diagonal)		18.5 inches (47 cm)	23 inches (58 cm)
Display Resolution		1366 x 768 @ 60Hz	1920 x 1080 @ 60Hz
Sound (Output)		5W x 2	
Dimensions (W x D x H)	(Without Stand)	444.7 x 52.6 x 278.2 mm (17.5 x 2.1 x 11.0 inches)	547.5 x 53.4 x 337.9 mm (21.6 x 2.1 x 13.3 inches)
	(With Stand)	444.7 x 187 x 356.4 mm (17.5 x 7.4 x 14.0 inches)	547.5 x 195 x 416.1 mm (21.6 x 7.7 x 16.4 inches)
Weight	(Without Stand)	2.95 kg (6.5 lbs)	3.25 kg (7.2 lbs)
	(With Stand)	3.2 kg (7.1 lbs)	3.5 kg (7.7 lbs)

✎ NOTE

- Design and specifications are subject to change without prior notice.
- For information about power supply, and more about power consumption, refer to the label attached to the product.
- Some models may not be available for purchase depending on the region.
- If there is no power cut-off switch, the power consumption is "0" only when the power cord is disconnected.
- DPMS(Display Power Management Signaling) Function does not work if you used in conjunction with the **HDMI IN (DVI)** port of this product.

Contact SAMSUNG WORLDWIDE

If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care centre.

Country	Customer Care Centre ☎	Web Site
AUSTRALIA	1300 362 603	http://www.samsung.com
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